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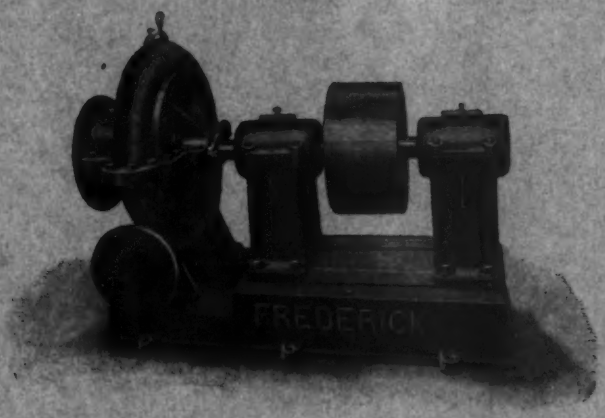

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ESTABLISHED IN 1872

PAPER TRADE JOURNAL

With Which Is Combined

PAPER

The Magazine of the Paper Industry

Vol. LXXXII, No. 6 Thursday, February 11, 1926

Paper Mill Superintendents Form New Division

Pennsylvania and New Jersey Paper Mill Superintendents' Association to Comprise the States of Pennsylvania, New Jersey, Delaware, Maryland and Greater New York—J. Garfield Ramsay Heads New Organization Formed at Annual Convention of the American Pulp and Paper Mills Superintendents Association—Comprehensive Program

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., February 8, 1926.—Although the convention of the American Pulp and Paper Mills Superintendents' Association, held in this city last week at the Benjamin Franklin Hotel, 9th and Chestnut streets, occupied but a single day, it covered a comprehensive program of constructive, educational, informative, and social features. The outstanding development of the meeting on February 6 was the organization of an entirely new division to comprise the states of Pennsylvania, New Jersey, Delaware, Maryland, to include Greater New York, and to be known as the Pennsylvania and New Jersey Paper Mill Superintendents' Association.

Officers Elected for the Coming Year

The honor of election to the presidency of the new organization was conferred upon J. Garfield Ramsay, superintendent of the Dill and Collins Company, Flat Rock Mill, Philadelphia, whose zeal and enthusiasm was responsible for the organization of the local territory as chairman of the committee on organization, appointed for this work at the National Convention of the Association, held in Niagara Falls last June. Others on the committee who aided in the formation of the newest, and 11th Division of the National Association were: E. T. A. Coughlin, National President, New Jersey Coated Paper Company, Montclair, N. J.; R. L. Erminger, National Secretary, Miami Paper Company, Miamisburg, Ohio; Roy R. Underdown, Heller and Merz, Philadelphia; Ward M. Smith, Philadelphia Paper Manufacturers Company, Manayunk, Philadelphia; O. V. Yates, Diamond State Fibre Company, Bridgeport, Pa.; Thomas Martin, Hammersley Manufacturing Company, Garfield, N. J.; Charles H. Kephart, York Haven Paper Company, York Haven, Pa.; J. W. Outerson, Paterson Parchment Paper Company, Modena, Pa., and John Bingham, Dill and Collins, Delaware Mill, Philadelphia.

Other officers of the new division elected to serve for the coming year were: First Vice-President, Thomas Martin; Second Vice-President, J. W. Outerson; Third Vice-President, J. A. Bower, Hammermill Paper Company; Secretary, O. V. Yates, and Treasurer, Ward M. Smith. These officers were elected to the Board of Governors: John Bingham, S. C. Wentz, P. H. Glatfelter Company, Spring Grove, Pa.; C. H. Kephart, W. Allan Lindsay, formerly proprietor Keystone Paper Mills, Philadelphia and J. E. Blosser, Scott Paper Company, Chester, Pa.

President Ramsay's Association with Industry

President Ramsay has been identified with the Philadelphia paper manufacturing industry for the past 28 years, and is one of the best known mill superintendents in the country. He is also active in the National Association as a member of the Executive Board. For the past nine years he has been superintendent of the Flat Rock Mill, having previous to its consolidation with the Dill and Collins Company, been in charge of production under the Nixon interests. For 18 years he was associated with the W. C. Hamilton and Sons mill at Miquon, with the Croker McIlvanie Company, the Hampshire Paper Company, as superintendent of the mills and other executive capacity. He has done much in the way of constructive work for the industry, both in the association and in the perfection of its technical side.

New Division Mills Summarized

In the organization of the mills in this territory there were enrolled more than 80 per cent of the superintendents. These executives were present at the convention in the Ben Franklin Hotel, to the number of 75, and with a total attendance of 150, including the managers of the mills, who were eligible to enrollment in the newly organized Pennsylvania and New Jersey Mills Superintendents' Association. In his talk later in the evening, L. D. Post read a message from President Norman W. Wilson, of the American Paper and Pulp Association, and Vice-President of the Hammermill Paper Company, giving the following summary of the industry with regard to its business resources, with particular reference to the mills which will be comprised in the district forming the new division and showing its importance. His message follows:

"The superintendent holds in his hands more of the success of the paper industry than any other single individual. He represents an invested capital of the enormous sum of $1,200,000,000. Superintendents during the year 1925 were responsible for the production of more than seven million tons of paper valued at more than one billion dollars. And in turning out this enormous tonnage of paper had under command an army of 125,000 men and women. Economists figure on the average of five dependents to each wage earner so that superintendents had last year either directly or indirectly supervision over the welfare of 750,000 people. Is it any wonder that I have the greatest admiration for men who successfully fill positions as superintendents of pulp and paper mills? Is it any wonder that I am a staunch advocate of an association composed of pulp and paper mill superintendents?

"I don't wonder that you have one of the strongest and most active organizations in this industry. And there isn't any question but that the Pulp and Paper Mill Superintendents' Association is of lasting value, not only to its members individually, but to the industry as a whole. Again, because of its many traditions

as one of the oldest and largest paper making centers in the United States, the division of New Jersey and Pennsylvania should be the strongest and most active division of the whole association. I say this, for the reason that the territory over which your division will have jurisdiction controls a really enormous tonnage of paper.

For instance, the 56 mills in Eastern Pennsylvania have a producing capacity of 2,525 tons daily. The 60 mills in New Jersey have a total producing capacity of 1,628 tons daily. The mills of Maryland have a total producing capacity of 405 tons daily. The mills of Delaware have a total capacity of 106 tons daily. And the mills of Greater New York have a total producing capacity of about 200 tons daily.

"All told, the mills of your divisional district have the enormous capacity of 4,864 tons, so that the importance of the district as a paper producing center is such that you really owe it to yourselves to have one of the most active divisions in the entire superintendents association. You may be sure that it will pay every superintendent big returns to be an active member of this division, for at your meetings you will always be certain to learn something that will be to your own personal advantage and to the advantage of your mill."

National President Coughlin Opens Convention

The meeting opened with an address by National President E. T. A. Coughlin, of the American Pulp and Paper Mill Superintendents' Association, who welcomed the delegates and then turned the morning session over to the various speakers listed in the program. The first on the list was R. L Eminger, National Secretary, who outlined the "Aims and Purposes of the Superintendents Association," the work of the organization. He was followed by W. M. Purdy, of the Gerrard Wire Tying Machine Company, Chicago, whose subject was both educational and informative. He carried his audience through the various phases of "Wrapping and Tying of Paper with Wire for Skid Shipments" showing the obsolete and antiquated forms, the Mexican method of stitching, binding used by the Japanese of bamboo, contrasted with the most economical and safe wire binders of modern days, illustrating his talk with moving pictures. He showed the paper makers and the old time packing processes, with their iron bands and straps, and the harmful results in damage to the paper goods effected in transportation. With the modern wire binding of the papers to the skids, the old time risks were eliminated with an economy in overhead and preservation of products, resulting in up-to-date means of confining paper shipments.

Study of Waste Salvage Suggested

Of particular interest and constructive service to the industry as a whole, was the suggestion made by President Ramsay, during the discourse on "Conservation of Waste in Paper Mills" given by T. J. Keenan, of New York city, of a plan whereby the superintendents might solve the problem of reclaiming waste from effluence. He placed before the members his suggestion that the National Association of Mill Superintendents' provide for tabulation by individual members of their experiences with the various systems now installed in plants, or on the market, for the purpose of conservation or recovery of waste from the white wash and which were listed generally as "Catch All-Save All" devices by the speaker. In explanation, he stated that he found these devices were often adaptable only under specific conditions within the mill environs and that so many of them could not be put to adequate services unless they measured up to the requirements of the individual mills, taking into consideration operation, natural resources, and layout of plants. From the tabulated information of the superintendents' experiences with these systems, President Ramsay felt the mills would derive much benefit in the prevention of loss of funds often tied up in apparatus which did not meet their individual needs for salvage of waste.

While Mr. Keenan, who substituted for G. D. Bearce, News Print Service Bureau, New York, obliged to cancel his engagement because of illness in his family, conveyed the message which the listed speaker would have given to his fellow associates, his talk was supplemented by further discussion on the subject of "Conservation of Waste" by Louis Miller Booth, of the Booth Chemical Company. Mr. Booth advised the superintendents against stream pollution and suggested careful study of prevention of contamination of the waters by unnecessary effluence of refuse. He gave his advice, he said, to shield the industry from the antagonism of the state authorities and agricultural interests now vigorously campaigning against the pollution of streams by large manufacturers and users of chemicals whose waste must flow off through waters or other contaminating forms of outlet.

Rosin Resources and Paper Conversion Explained

From the primeval forests where turpentine resources covering more than 200,000 acres of land are conserved for chemical commodities, including rosin size, for the paper makers use, E. J. Johnston, general manager of the Holyoke plant of the Paper Makers Chemical Company, brought through the silver screen a first hand knowledge of the origin of these sizing products. While the moving machine clicked its way over the vast territory of the company's natural resources in Georgia, purchased during the past year, and vividly led the mill men through the towering turpentine forests, there was portrayed a practical lesson in the gathering of the turpentine liquid; its refining and extraction of the rosin; shipment by five masted schooners owned by the company to Boston, and then its transformation into sizing in the mills and final application in paper making. Each process was explained by Mr. Johnston, as the reel brought it to view.

The last of the business discussions in the afternoon was that on the explanation of the principle of operation of the "Voith Inlet" given by William Bennett, of the Valley Iron Works, Appleton, Wis. After passing a booklet on the Voith High Pressure Stock Inlet, diagramed with the minute parts charted, Representative Bennett explained its methods of feeding the stock to the Fourdrinier paper machine.

A mirthful moment was enjoyed during the banquet in the evening when W. Hendri Lloyd, sales manager of the Dill and Collins Company, in the role of toastmaster, in humorous vein performed his part as "master of ceremonies" and added to his fame as an interesting dinner speaker, holding his audience all through the introductory address. Among other addresses were those of National President Coughlin, President Ramsay and Rev. Ralph W. Sockman, New York, who preceded the closing vaudeville entertainment in the late evening.

Spread of the association's activities, and how and why these occurred, were points stressed by the national executive during the course of the banquet. He told how the organization has grown from its original handful of men to the present day enrollment of over 600 members. Its rapid increase he laid to the evidences of the good it has accomplished in the industry. This factor, he said, has brought all into hearty accord with the association's work. He told of the strides made within the past year, of the South Eastern Division, organized at this time last year, and its increase to 60 members, and the excellent results it has accomplished for so brief a period of its history. He gave a sketch of the connection with the National Association work which the newly elected officers had filled and which he believed well fitted them to guide the new "youngster" to the fold, on its way to a successful goal.

A resume of the newly organized division and its arrival in the ranks of association affiliations was the principal thought of the talk of President Ramsay. He thanked the National officers for their co-operation in the formation of the Pennsylvania-New Jersey Association and the valuable aid rendered in stimulating an interest among the local paper making executives of the mills. He expressed his hopes and confidence in the future of the new organization, now that it was safely launched along the ways to constructive effort for the industry which it represents.

Chicago Paper Industry Generally Optimistic

Local Paper Merchants Anticipate Record Year—Kraft, Book Papers and Cheap Sulphite Going Strong—Wrapping Paper Business Expanding—Old Paper Prices Inclined to Advance—Safety Campaigns and Accident Prevention Work—An Unique Exposition

[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, February 6, 1926.—This week's paper report contains nothing but optimistic items, such as a booming business in kraft, book papers and cheap sulphite, and no decrease in the steady demands from the mills for paper stock. Prices remain at practically the same level as the preceding week. Old paper prices may shift for the better within the next few days. Wrapping paper business has been of such quality that price changes may be imminent. Business for the week has on the whole been as good as any other week of the new year, comparing well with the business of last year.

From the outlook of the various paper merchants, business will be better this year than last, and indeed, so optimistic have they become that there is every indication, according to their figures, that 1926 will set a record which has not been equalled since 1920. This is, of course, dependent on the maintained rate of turnover which has been done for this year, not counting unforeseen events which may crop up.

Dependent Upon Business Conditions

The paper business is peculiarly dependent upon the growth and progress of general business conditions throughout the country. For this reason paper men study the general business and economic conditions, and from them draw fairly accurate reports of what paper business will be for the coming period. From the reports which have been drawn up, nothing could be more hopeful for the business of paper in the city of Chicago.

Printers and stationers report no let up in the use of printing and writing papers. Looseleaf is selling at about the rate with which the new year started—an unheard of development of business, as taught by previous years. The printers report good business, more direct-by-mail orders in the way of circular letters and pamphlets, and general all-round substantial business in printing. This is one of the good signs for the paper trade.

Paper Mills Install Safety Devices

Paper mills are giving more attention to safety campaigns and accident prevention work than ever heretofore. Due to the moist, and sometimes wet condition of floors in paper making plants, employes have been subject to electric shocks from extension wires running to the mechanical equipment of these plants. Water soaks through the average insulated wire and in addition to transmitting the "juice" to employes, frequently blows out fuses and in other ways discommodes those entrusted with the making of paper. Several plants in the Chicago territory have recently installed extension wires of a new "Paracore," a rubber coated wire. In addition to the usual insulating material, this new wire is covered with a one-sixteenth layer of solid rubber, making it absolutely waterproof. Salesmen of the United States Rubber Company state that the plants now using this Paracore wire declare it is the only material so far on the market which perfectly eliminates moisture and thereby prevents the injuries and handicaps caused by the wiring used in ordinary extension cords.

Bradner-Smith Holds House Organ Exhibition

The house organ exhibition of the Bradner-Smith Paper Company, of 333 South Desplaines street, is being heralded as an innovation by a paper company, as well as a noteworthy stride in the business of direct-by-mail advertising. The belief in house organs has been a mooted question among business men for some time, and this splendid exhibition is exhibiting in fine fashion some of the best work in the field. The invitation reads on the first page: "You are cordially invited to attend an exhibition of House Organs in the Library of Printed Specimens, during the month of February, 1926." On the second page starts a type of inviting reading matter which has been remarked upon by the many paper men and other numerous concerns which have received copies of the invitation:

Some Clever and Useful Maxims

"Some folks like formality, so just to satisfy them we have to put a kind of formal looking invitation on the first page of this announcement. As a matter of fact, we don't like formality—and so we are adding a booklet on behind the invitation.

"I never walked a mile for a Camel—but there have been times when I would have gone farther than that to get a fresh idea for an editorial or a sales message. Especially, if I knew where to get it for nothing.

"If you have anything to do with printing or editing a house organ, you will be glad to know that one of the greatest collections of house organs in America is right here at your door.

"Over a thousand firms are represented, many of them with several issues. They come from every corner of America. One is written in Chinese. I can't read it. There are big ones, and little ones; elaborate books and simple pamphlets. Some are technical and dignified and others are light and gay.

"Robert Ramsay says there are four kinds of house organs—salesmen's, dealers', employes', and consumers'. You will find them all in this collection."

Other interesting data is included in the invitation, and the urge to come is pressed upon thousands of men who are concerned with house organs, either in the writing or printing end, or in selling them. Interested business men are now flocking to the doors of the Bradner-Smith Paper Company to see this interesting collection, and indeed, it is something for all paper users to see.

The "Library of Printed Specimens" alluded to is only forty feet square, but this is ample to hold the house organs, and is one of the interesting features of the company.

Miscellaneous Trade Items

The Middle States Wrapping Paper Association will meet February 9 at the Congress Hotel, with a large attendance expected.

Next Tuesday will be the date of the next meeting of the Chicago Paper Association. It is expected that at this meeting Charles Harder, of the F. C. Traver Paper Company, chairman of the Cost Survey Committee, will offer for resolution the adoption of the cost finding system which has been advocated by the National Paper Trade Association. The meeting will be held at the Illinois Athletic Club, presided over by President Edgar A. Hall, Jr., of the Pilcher-Hamilton Paper Company.

The Quota Club of the Pilcher-Hamilton Paper Company this year boasts of the following honor roll, topped with the following expression: "Do More Than—" and at the bottom, "They Did!"—Edward Topping, Albert S. Harriman, William J. Sinclair, George J. Schultz, Erwin J. Heinrich, Henry D. Reinecke, L. Otis Green. These men excelled in their work for the year, and succeeded in overtopping their quota

The Twentieth Century Limited will have at least three cars filled with paper men exclusively on the evening of Sunday, February 21, when there will be an exodus from this city to the Waldorf-Astoria in New York, to attend the annual meetings of the National Paper Trade Association and the Pulp and Paper Association. The combination of the two associations for the first time in three years is accorded much favor in Chicago.

Philadelphia Paper Trade Continues to Expand

All Sections of Industry Experience Increased Demand for Immediate and Future Deliveries—Following Temporary Reaction, Prices Return to Former Levels—Printers and Engravers Ordering Fine Papers in Good Volume—Coarse Paper Market Much Steadier

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., February 8, 1926.—Early February has been holding to the brisker business days that set in during the closing week of January and the trade is enjoying an activity that leads to belief of continued demand for many months to come. Not only are orders placed for all grades of papers but inquiries are increasing for immediate and future deliveries on a broadening scale. The stormy weather of the week did not interefere with the growth of paper distribution and the dealers are convinced that conditions are on a sound basis for an upward swing as the month advances. Prices are holding steadier to higher levels after a temporary reaction in the post inventory days, when mills were disposing of hang-over stocks at reductions in some of the grades of both fine and kraft papers. These reductions were at first a disturbing element, but now that they have been rectified the trade has again settled into a steadier course towards profitable trading.

Broader Market for All Fine Papers

Indications that the printing industries will be consumers of larger volume and varieties of papers in the present year are most pronounced at this time. All the larger dealers cheerfully admit the broadening of demand and hope for the continuance of this active market for all grades of fine papers. Both mill representatives and distributors are being patronized by consumers in the allied industries on a broader range than in the same period of 1925. While last year there was free buying in a few grades of publishers' papers, bonds, covers and like specialties for the prominent printing and large publication houses, this year the smaller commercial printers, engravers and stationers are placing their orders for numerous stocks and varied assortments that last year were moving slowly from the warehouses.

Coarse Papers Continue Active

With a steadier market in so far as quotations are concerned, coarse paper dealers are seeking customers with more confidence of securing orders and maintaining a fair margin of profit. The publicity given to the price recessions in the kraft market of post inventory days has been responsible for stability among the various grades of these products that were being subjected to price cutting in order to relieve congested warehouses among a few of the coarse paper distributors in this city and by some mills intent upon cleaning out hang overs. Now that the local distributors involved have reduced their wares at prices below those quoted in the open market, the kraft situation has been clarified, and prices have advanced slightly, though not above the level of last Fall. Competition has lost much of the keenness which was apparent at this season last year, when kraft was cut considerably in order to secure orders. All grades of coarse papers have been in demand and a fairly well maintained volume of traffic has been maintained.

Postpone Graphic Arts Night

Graphic Arts Night has been postponed until March 11 owing to the inability of the combined allied associations to obtain use of the Penn Athletic Club until that date. The Committees in charge of arrangements representing the Typothetae and the Philadelphia Paper Trade Association met in mid-January and decided to hold the Annual Graphic Arts Night on February 18 and later selected the Penn Athletic Club as the place in which this combined affair should be held. However, it was learned that the Club building, recently erected, and one of Philadelphia's most handsome athletic centers, would not be ready for occupancy until March. When this was learned it was decided to hold the annual dinner at the later date so that the printers and paper men might enjoy the many facilities for entertainment which this luxurious club surroundings offer.

George W. Ward Promotes Graphic Arts Exhibits

Ever since the D. L. Ward Company became a leader in the Philadelphia trade in the field of art as it pertains to the printing and advertising industry and its combined use of papers, this firm has been conducting meritorious exhibits of accomplishments in the graphic arts. The Art Room of the Ward Company on the second floor of the building, 26 S. 6th street, is featuring specially for its February exhibit 300 original and proof specimens of commercial art by 38 prominent artists. The Exhibition Committee of the Poor Richard Club of this city, whose membership comprises all the well known advertising firms, has assembled over 100 of the most sucessful advertising campaigns of the country, a part of which will be shown on February 19 at a special meeting and the remainder on March 25 at the Poor Richard Club.

A. M. Collins Mfg. Co. Limits Local Distributors

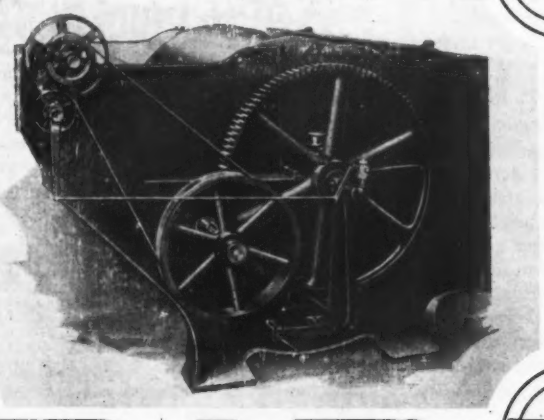
With the dissolution of the Anderson Paper Company, formerly engaged in the distribution of cover papers and card boards, the A. M. Collins Manufacturing Company of this city, has announced the limitation of the Quaker City distributors. Beginning last week the Philadelphia distributors were confined to the D. L. Ward Company, Garrett-Buchanan Company, and A. Hartung, Inc. Before its recent dissolution the Anderson company was included among the local representatives of the Collins lines distributing its covers and card board specialties. The larger portion of the stock of the Anderson company was purchased by the D. L. Ward Company and A. S. Datz and Son, through sale by a committee appointed by friendly receivership with J. K. Kohl, credit manager of the Garrett-Buchanan Company, and A. I. Watts, of the Cherry River Company, on its personnel. It is understood that A. S. Anderson, head of the defunct company, will join the newly incorporated Richie-Howorth Company when it opens its local paper distribution offices and warehouse.

S. D. Warren Company Talks on Ad Plans

With an audience of 156 printers, Jesse W. Clark, field representative of the S. D. Warren Company, last week, outlined the 1926 advertising plans of the manufacturers in the Graphic Arts Room of the D. L. Ward Company. The Ward company, local distributors of the Warren products, were hosts to the printers at a luncheon during which the speaker made known the intensive publicity campaign to be conducted through the press, newspapers, publications, and other channels of reaching the public.

Whiting Paper Company Displays 1926 Papeteries

One of the most attractive and colorful assortments of high grade and popular priced quire packed staple lines of papeteries ever put on the market by the Whiting Paper Company is now being displayed at the Philadelphia headquarters, under Manager George D. Lapham, at 619 Chestnut street. The new assortment comprises the 1926 lines now ready for distribution to the trade. There are many beautiful shades of papers shown in the boxed goods, all of the most modern and modest colors. Featured among the very latest of additions to the lines are Whitings Long Grain, novelty finishes, in white, Turquoise (green), topaz and delft, made in several sizes for ladies and gentlemen, with plain and lined envelopes. Others of new styles are Whiting Federal Poste, deckle edge, in white and colors; two new shades in Polo Cloth, raffia and nectar; Whiting's Organdie, packed in tandem style quire sizes, and Whiting's English Vellum, in a range of six colors and white



The BIRD SAVE-ALL

A common sense pulp saver

Recovers the valuable fibres and returns them ready for immediate use.

Prepares the white water for continuous re-use.

Works automatically. The expense for operation and maintenance is negligible.

Takes up very small space.

Low in first cost and installation cost.

BIRD MACHINERY

BIRD MACHINE COMPANY
South Walpole Massachusetts

8802

with plain and lined envelopes, as well as wide bordered sheets and envelopes to match. There are thirteen plate glass display cases given over to the exhibition, arranged to exhibit the lines to the best advantage in the recently remodeled display rooms on the first floor of the local branch.

Charles T. Robinson To Incorporate

Application for incorporation of the long established business of Charles T. Robinson, 107 Walnut street, under the laws of Pennsylvania, was made during the past week. The firm has long been engaged in the manufacture and sale of bags, coverings, cordage, and other objects made from jute, cotton and paper. The applicants for the charter are former associates of the firm long connected with the company. They are Charles T. Robinson, William N. Lipsey, Henry Sachleben, Jr., Harshall H. Robinson and John S. Robinson. The business has been established since 1870 and is devoted principally to the manufacture of burlap and jute bags, although there is a department devoted to sale stocks for the paper manufacturing industry, including the various grades of bagging light gunny paper content. The firm also disposes of mill job lots in paper sacks and bags of all grades.

Penn Card and Paper Co. Adds Card Cutting Machine

With the installation of a new rotary card cutting machine, the Penn Card and Paper Company, 20 N. 6th street, is prepared to extend its cut specialties and service to its patrons. The new cutter is that of the latest improved type manufactured by the Samuel Langston Company of Camden, N. J. Heretofore card cutting for the Penn Card and Paper Company was done on the outside. With the new equipment the firm will be in a position to confine this work to its own premises along with its other converting business. Myer Magill, head of the firm, who has been on a brief vacation to Atlantic City, has returned and is now on his way to New England, where he will make a tour of the mills for the purpose of buying stocks for his firm.

Paper Men Rule Poor Richard Club Session

The honors of the Thursday session of the Poor Richard Club, held for the purpose of hearing a talk on "Printing Processes," by Julius Weyl, were left entirely in the worthy hands of the paper trade associates of that advertising fraternity. It was a paper man, Morton Godon-Neff, of Dill & Collins Company, who brought the poster printer and Speaker Weyl to the club. One of the most active and best known of trade associates, President Norbert A. Considine, of the Paper House of Pennsylvania, and vice-president of the Poor Richard Club, introduced him. Then the closing honors were left to President George W. Ward, of the D. L. Ward Company, who extended thanks for the elucidations on printing as presented by the speaker.

Cotton Waste Exchange Meets

A visitor from the metropolis who attended the annual convention of the Cotton Waste Exchange, held during the week at the Bellevue-Stratford Hotel, was J. E. O'Brien, of George W. Millar & Co., New York, paper stock and cotton waste dealers, and a member of the exchange. More than 250 members attended the affair, including several of the local waste trade associates of the Philadelphia Wholesale aWste Merchants Association. President Joseph G. Bryan, of Oscar Smith & Son, presided.

John M. Hart Co. Opens Boston Office

BOSTON, Mass., February 1, 1926.—John M. Hart Company, Chicago, has opened a New England office at 80 Federal street, Boston, Mass., in charge of A. W. Mack, a paper man of many years experience, and who is well and favorably known among the New England trade. This office was opened to take care of the rapidly growing New England business.

This company has for many years served as manager of sales for the well known Papyrus line of pie plates and butter dishes, and has more recently been appointed manager of sales for Nukan Food Containers.

Box Board Production for December

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., February 1, 1926.—The Department of Commerce announces December figures on the operations of boxboard manufacturers, based on reports of 89 firms operating 111 plants. The capacity data in the following table vary according to the normal number of working days in each month, Saturdays, Sundays and holidays being excluded, since the five-day week was adopted by about 80 per cent of the mills.

Year and Month	Operation: Inch hours Capacity	Operation: Inch hours Operated	Operation: Per cent of capacity	Production: Tons Capacity	Production: Tons Output	Production: Per cent of capacity	Orders received (Tons)	Unfilled Orders (end of month) (Tons)
1924								
August..	7,960,302	7,973,129	100.2	185,619	183,570	98.9	202,919	122,927
Sept.....	7,960,302	8,036,712	100.9	185,619	188,669	101.6	168,299	103,056
Oct.....	8,718,426	8,422,014	96.6	203,297	196,633	96.7	180,846	87,563
Nov.....	7,202,178	7,346,373	104.8	167,941	170,550	101.6	174,184	94,711
Dec.....	8,339,364	7,488,756	89.8	194,458	170,674	87.8	180,284	107,584
Total (12 mos.)	105,400,356	96,190,681	91.3	2,459,970	2,144,790	87.2	2,146,943	.....
1925								
Jan.....	7,960,302	8,388,897	105.4	185,619	199,633	107.5	199,649	112,911
Feb.....	7,600,440	7,550,968	99.3	177,320	177,292	100.5	162,724	100,403
March..	8,360,484	7,569,995	90.5	197,186	179,067	91.0	169,924	90,062
April...	8,360,484	7,654,378	91.6	197,186	185,866	94.3	169,914	79,127
May....	7,980,462	7,111,776	89.1	188,223	163,956	87.1	175,246	83,415
June....	8,360,484	7,983,150	95.5	197,186	190,310	96.5	193,564	92,022
July....	8,740,506	8,272,036	94.6	206,149	196,522	95.3	216,013	111,919
August..	7,980,462	8,069,721	101.1	188,223	196,527	104.5	211,385	119,248
Sept.....	7,980,462	8,152,403	102.2	188,223	198,749	105.6	191,840	109,191
Oct.....	8,360,484	8,438,784	100.9	197,186	204,492	103.7	207,178	101,981
Nov.....	7,980,462	*7,923,058	*99.3	188,223	*193,140	*102.6	*195,142	*103,304
Dec.....	8,740,506	7,777,060	89.0	206,149	186,976	90.7	189,295	105,993
Total.	98,405,538	94,892,226	96.4	2,316,873	2,272,530	98.1	2,281,874	.....

Year and Month	Shipments of boxboard (Tons)	Stocks of boxboard end of month (Tons)	Consumption of waste paper: Tons Capacity	Consumed	Per cent of capacity	Stocks of Waste Paper (end of month): On hand (Tons)	In transit (Tons)	Unshipped purchases (Tons)
1924								
August...	184,941	48,935	175,938	181,752	103.3	161,793	17,002	34,919
September.	191,203	46,401	175,938	182,521	103.7	172,240	15,319	41,766
October...	198,352	44,682	192,694	189,187	98.1	175,946	14,921	27,804
November.	169,018	46,214	159,182	162,771	102.3	164,065	15,523	29,423
December.	168,677	48,211	184,316	163,878	88.9	179,442	14,329	31,620
Total (12 mos.)	..2,141,209	.....	2,329,546	2,048,733	87.9	.....	.....	.....
1925								
January...	195,501	52,466	175,938	193,285	109.9	172,382	18,846	34,974
February..	176,101	53,960	167,910	170,023	101.3	172,456	16,635	27,110
March.....	180,418	51,835	184,778	170,363	92.2	176,035	13,199	22,948
April.....	179,772	57,212	184,778	170,487	92.3	172,223	14,307	32,590
May.....	168,353	53,327	176,379	159,095	90.2	174,726	12,686	26,129
June.....	184,928	59,452	184,778	179,953	97.0	166,467	13,872	25,246
July.....	190,667	64,600	193,177	184,295	95.4	160,099	11,953	34,358
August....	204,766	*55,560	176,379	187,301	106.2	149,984	14,598	29,761
September.	202,599	51,699	176,379	187,620	106.4	155,476	13,866	35,721
October...	213,019	46,054	184,778	189,684	102.7	168,305	18,587	30,324
November	*193,847	44,541	176,379	*181,326	*102.8	*166,089	15,010	31,918
December.	186,606	44,911	193,177	175,989	91.1	173,955	13,156	24,340
Total...	2,276,577	.....	2,174,830	2,149,421	98.8	.....	.....	.....

* Revised.

Lumber Cut in Quebec

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., February 8, 1926.—The lumber cut in the Province of Quebec for the winter 1925-26 is expected to be about 1,500,000,000 feet, according to C. G. Piche, Chief Forester for the Provincial Government. In all some 30,000 men are employed in the lumber camps of the Province, and these camps are being visited regularly by Government inspectors, of whom some 200 are employed.

Paper Index Number Higher for December

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., February 10, 1926.—The paper industry is given an index number of 119 for December as compared with 106 for the same month of 1924 and 114 for November, taking 100 from 1919, according to the Survey of Current Business of the Department of Commerce. The paper index number for an annual average for 1925 was 111 as compared with 107 for 1924.

Your Paper is Made in Your Beaters

The Dilts approved NEW TYPE Beating Engine is an improvement over standard Hollander type beaters. It circulates the stock more rapidly, handles thicker stock, and uses no more power. It is a better beater, and there are many details of its design and construction that will interest you.

If your mill's beater equipment is not perfectly satisfactory, or if you will require equipment for a new mill, you will do well to consult us. The beater room is an important department of your plant.

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EXPORT OFFICE ~15 PARK ROW~ NEW YORK CITY

Wisconsin Organization's Reforestation Program

Nekoosa-Edwards Paper Co., of Port Edwards and Nekoosa, Plans Comprehensive Undertaking —Three Thousand Acres of Waste Land to be Reforested—Results Obtained May Encourage Others to Launch Projects—Experienced Forester to Direct Work

APPLETON, Wis., February 5, 1926.—Public announcement has been made by the Nekoosa-Edwards Paper Company, of Port Edwards and Nekoosa, Wis., of a comprehensive program of reforestation which the company will undertake during the coming year. Three thousand acres of waste land in the vicinity of Nekoosa and Port Edwards are to be reforsted, and a nursery is to be established at Port Edwards which will supply planting stock for the company's project and at cost of production to the public.

The Nekoosa-Edwards Paper Company's undertaking will be the first large-scale private forestry project in Wisconsin, and officers of the company state that it is being entered into not merely for the sake of the wood to be produced or the contribution that will be made to the beauty of the area involved, but in the hope that the methods followed and the results obtained will prove an important factor in arousing interest in reforestation and in encouraging others to launch similar projects.

Location of Large Acreage

The 3,000 acres upon which the company will make its plantings lie near Port Edwards and Nekoosa on both sides of the Wisconsin River, but are chiefly on the east side of the river, in the towns of Grand Rapids and Saratoga. About 1,000 acres of the land is now practically bare, some 500 acres partially covered with trees, while the remaining 1,500 acres are already well forested. Plantings will be made first upon the bare land, while forest supervision and fire protection will be extended to the whole area. An experienced forester, F. G. Kilp, who served for more than ten years with the state forestry department, has been engaged by the company to direct the work.

Jack Pine Plantings to Be Used

Plantings will be largely of jack pine, the tree best suited to the soil of the land available, but experiments will also be carried on with smaller tracts of white and Norway pine and white spruce. The first plantings, which will be made in the spring of the present year, will consist of approximately 100,000 jack pine seedlings, which will be placed on a 100-acre tract along state trunk highway No. 13, across the river from Nekoosa. The second year, the company hopes to be in a position to plant 300,000 seedlings, and the planting program will be carried on until the entire 3,000-acre tract has been covered.

Pointing out that there are more than 1,000,000 acres of land in Wood, Jackson, Adams and Juneau Counties that are now unproductive, the Nekoosa-Edwards Paper Company, in the statement announcing its reforestation program, expressed the hope that more adequate fire protection might be secured for this area, and a fairer method adopted for the taxation of timber lands, to the end that more of this vast unproductive area might be devoted to the growing of trees.

"Residents of this section of the country interested in conservation of our natural resources feel that although greater interest should be developed in Wood County and its neighboring counties for a more beautiful country," the company's statement says. "The unattractive, fire burned waste lands along the sandy roads running through Wood, Adams, Jackson and Juneau Counties, can be made into beautiful and pleasant drives if a little time, effort and money be expended for these purposes by the people of these counties. Forest plantings like those which this company will set out in the future will mean greater wealth and beauty for the community.

"Abundant and convincing evidence of the possibilities of growing successive crops of timber on private land as a business has aroused the interest and is receiving the attention of forest industries throughout the country. Forestry in general is developing into a practical business in many parts of the United States under serious handicaps, such as unjust or unwise taxation."

Timber Taxing System Unjust

The injustice of the present system of taxing timber growing each year, which is the same as would be a tax on the farmer's crops each week or month of the year, is pointed out in the statement, which follows:

"District fire protection organizations and forest land tax relief are absolutely essential for success and encouragement of private forestry programs in Wisconsin. The Wisconsin Conservation Commission has done exceedingly well in forest fire protection, considering the limited funds made available by the state legislature for such purposes. Taxing such crops annually before they reach a merchantable size is unjust, and for that reason some form of taxation relief for forest land must be promised and enacted by the Wisconsin legislature before it is too late, and the forest industries move out of the state."

Officers of the company explained that the present forestry project is being undertaken in anticipation of legislative action providing the needed tax relief within a few years. The company will provide its own system of fire protection for its 3,000-acre tract, but hopes for the establishment of a fire protection district in this section of the state to make reforestation of waste lands throughout this entire area possible.

Importance of Fire Protection

"First and foremost for successful reforestation," the statement says, "is fire protection. At the present time there are six organized fire districts in Wisconsin. These districts take in either part or all of the following counties: No. 1, Douglas, Bayfield; No. 2, Burnett and Washburn; No. 3, Iron, Vilas and Oneida; No. 4, Forest, Florence and Langlade; No. 5, Florence, Oconto and Marinette; No. 6, Price and Ashland. By an act of the state legislature a bill authorizing the establishment of eight fire districts was enacted and the conservation commission given power to create these districts. There are still two districts to be established and there is no reason why District No. 7 should not take in parts of Wood, Juneau, Adams and Jackson Counties in the very near future. An earnest effort should be made by the county boards, and every organization and citizen interested in forest conservation should get behind a movement to have District No. 7 located in these counties next spring when the fire season opens. Protect our present timber resources and make these counties stand out as an example of good fire protection and beautiful forests."

To Establish Forest Nursery

The forest nursery which the paper company will establish in connection with its forest project will probably be located on the island in the Wisconsin River at Port Edwards. Here, beginning with 1927, it is planned to plant hundreds of thousands of seedlings. These will supply the necessary stock for the company's plantings, and will also be made available to farmers and others interested in reforesting land throughout the vicinity. The trees will be sold at the cost of production. The company announces and expresses the hope that there will be an extensive demand for

In a Space of 3 feet YOU CAN—

1. Raise and lower top roll
2. Lower Top Roll
3. Operate Paper Guide
4. Raise Submerging Rolls
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Built for steady endurance. Simplified construction insures constant uninterrupted performance. Labor-saving features. Time-saving improvements. Money-making proficiency.

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Beloit Iron Works **Beloit, Wis., U. S. A.**

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the seedlings. The company's own plantings will be open to the study and inspection of all who are interested, and the forester will be available to give advice and information on forestry problems.

Ambitious Lake Impounding Project

Coincident with this project, but having no real connection, is the lake impounding project of the Nekoosa-Edwards Paper Company, whereby the paper company will obtain their water from Four Mile Creek for use in paper manufacture and supplanting the water of the Wisconsin River that is not of the desirable clarity.

A lake two miles long is being made from this creek near Nekoosa and Port Edwards. Construction of a 20-foot dam and other work in connection with the project are expected to be completed this coming spring. The basin, which has been named Buena Vista Lake, will be filled by turning in the spring fed waters of the creek, which last summer were 15 degrees colder than the water of the Wisconsin River there.

An interesting feature of the project is to be a 12-acre natural settling basin, into which water from the lower end of the lake will be led. Although much of the heavy iron content of the water will settle in the main lake, in the larger basin the water will be chemically treated to precipitate the remainder.

The water will then be pumped by 5,000-gallon pumps to the mill a mile away, through a 30-inch pipe line, laid under the Wisconsin River. The settling basin will save at least three-fourths of the chemicals required in the usual four-hour settling period, and will give clear water at a low cost.

Hydro-Electric Plant to Be Constructed

A hydro-electric plant will be built in connection with the pumping station, to supply power for pumping the water. Surplus power will be carried to the mills over a 15,000-volt transmission line, which can be used to operate the plant when the local power fails.

It is expected to take a crew of 150 men at least three months to complete the pipe line and the settling basin, and the clearing of the lake bed probably will require six months. Milwaukee and Columbus, Ohio, firms are assisting local engineering companies in the work.

The Nekoosa-Edwards mills normally consume 10,000 gallons of water a minute, and as the minimum flow in the Four Mile Creek is 40,000 gallons of water, it is expected that the reservoir will be able to take care of any probable expansion of the plants.

Buena Vista Lake will be from 200 to 1,000 feet wide and will be 20 feet deep at the lower end. The lower part will be surrounded by a heavy growth of pines and the lake is expected to develop into a summer resort that will compare favorably with any of the smaller lakes of Northern Wisconsin.

Consolidated Officers Re-Elected

All officers and directors of the Consolidated Water Power and Paper Company of Wisconsin Rapids were re-elected at the annual meeting held in the company's offices in the aforementioned city. About fifty stockholders were present. The officers are: G. W. Mead, president; R. L. Kraus, vice president; G. P. Berkey, vice president; I. P. Witter, treasurer; E. B. Redford, secretary. Messrs. Mead, Kraus, Berkey and Witter and T. W. Brazeau make up the board of directors. Excellent progress was reported for the business year of 1925.

Wisconsin Valley Annual Meeting

The Wisconsin Valley Electric Company, of Wausau, owned by paper mill capital, held its annual meeting on Monday and re-elected the board of directors. The members of the board are: C. C. Yawkey, president; B. F. Wilson, vice president; C. S. Gilbert, treasurer; A. L. Kreutzer, J. S. Alexander, D. C. Everest and H. L. Geisse.

Stream Pollution to be Discussed in Paper Week

How the paper industry is endeavoring through its highly trained technical men to guard against the pollution of streams by paper mill waste will be told during the coming Paper Week at the Convention of the Technical Association of the Pulp and Paper Industry.

The industry has long been studying this subject, and has investigated two phases of the problem, the pollution of the water, and the actual financial loss sustained in the wastage of raw material which in its finely divided form passes into the streams as mill effluent. G. D. Bearce is chairman of a special committee on this subject. The investigations of his committee show that the harm done by waste material to fish life is much less than is often thought and is insignificant in comparison with the actual money loss in the value of the fibre, clay, chemicals and other constituents of the mill effluent.

The program will involve three days of highly technical study of various problems, from the discussion of new mechanical and chemical processes to such subjects as Alpha Cellulose, a specially prepared type of sulphite pulp, methods of testing paper and pulp, problems involving different types and finishes of paper, such as glue for coating of surface coated papers, will be among the other topics of the week.

Woodland Sections Convention Program

Practical application of forestry principles by the paper mills of the United States will be the chief subject of discussion at the annual convention Wednesday, February 24, at the Waldorf-Astoria, New York, of the Woodlands Section of the American Paper and Pulp Association. The Woodlands Section is composed of the technically trained foresters and woods executives who are working on this problem for the pulp and paper mills.

The paper industry has been the leader in the national campaign for forestry legislation and industrial application of forestry, because of the vital relationship of forestry to the raw material supply of the nation's paper mills.

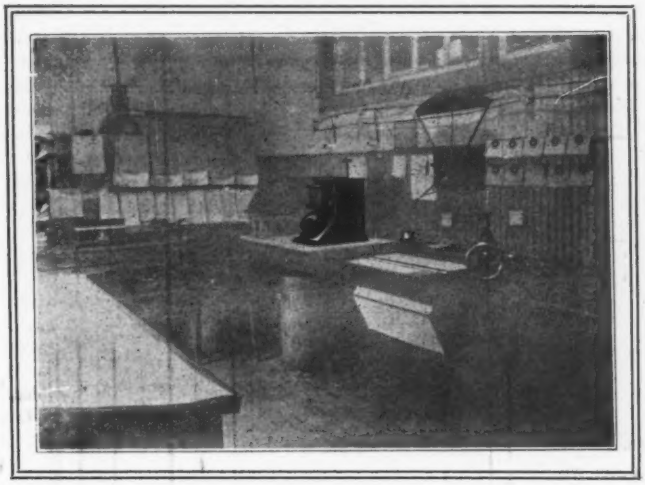
Austin Cary, of the United States Forestry Service, will present the national aspects of the forestry situation. D. A. Crocker, the Section's forester, will tell of his recent pulpwood survey in the lake states. Practical forest management in New England, the Appalachians and the Lake States will be discussed by consulting foresters and operators.

In the evening at an informal dinner B. F. Heintzleman, of the U. S. Forest Service, will discuss the possibilities of Alaska as a source of raw material for the paper mills, and George F. Authier, a well known Washington correspondent, will speak on "The Journalist's Interest in Forests and Forestry."

To Operate Riverton Paper Mill

HARTFORD, Conn., February 8, 1926.—Permission has been granted by Judge Marvin of the Superior Court to Receiver J. Harold Williams, of the Riverton Paper Company, Inc., to enter into an agreement with the company for the operation of the plant in Riverton subject to an arrangement with the receiver as to the proceeds.

This paper mill is in the village of Riverton, in the southern part of the town of Hartford county, and is under foreclosure of a $50,000 mortgage held by Gouverneur M. Carnochan, of New City, Rockland county, N. Y. Gross, Gross & Hyde, of Hartford, are lawyers for Mr. Carnochan, and Mr. Williams, a member of that law firm, was appointed receiver of the paper company, January 6. The plant has not been in operation recently, and the receiver was empowered to employ operatives and conduct the business and conserve the assets. Within a few days the latter plan of having the company operate the plant under an arrangement with the receiver was submitted to Judge Marvin. W. G. Manchester, of Winsted, is attorney for the company.



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Paper Plans for Sesqui-Centennial Exposition

PHILADELPHIA, Pa., February 8, 1926.—A conference of importance to the Philadelphia paper trade in particular, but of interest to the entire American industry, was held Thursday afternoon, February 4, at the Poor Richard Club headquarters.

The entire association was called by President Morgan H. Thomas to receive the report and recommendations of the committee on the paper exhibit at the Sesqui-Centennial Exposition. This subject occupied the members for fully two hours, when the entire project, which has been drifting for two years without accomplishing anything definite, crystallized into very definite plans that were enthusiastically received by the members.

Chairman Walter Presents General Plan

Simon Walter, chairman of the committee, first presented an outline of the general plan, which calls for approximately twenty thousand square feet of floor space in the Liberal Arts Palace. Mr. Walter explained that this was the first of the exposition buildings to be erected. It has been under roof for the past month and will be ready for occupancy in ample time to prepare a worth while paper exhibit before the opening day, June 1.

Chairman Walter, by the way, is a prominent member of the City Councils of Philadelphia, a close friend of Mayor Freeland Kendrick, and he has undertaken the job of preparing a paper exhibit for the exposition, following the example of a number of the Mayor's friends, who backed his stand at the conference of representatives of various states in Philadelphia on January 20 that the Sesqui-Centennial of the Signing of the Declaration of Independence and the establishment of the American Government should be celebrated in 1926, and not the following year. These friends have taken off their coats and plunged in to make the exposition a success, and huge forces of men are now working day and night to complete the grounds in South Philadelphia where the exposition is to be held.

More Than 200 Conventions Scheduled

Chairman Walter reminded the members of the Philadelphia Paper Trade Association that it was their duty as citizens of Philadelphia to help make the exposition a success. Many of the local paper merchants have invested in bonds of the exposition so that they have a financial interest as well as a moral responsibility in the project.

There are over 200 conventions scheduled for Philadelphia during this Sesqui Year, including the Associated Advertising Clubs of the World, the International Craftsmen's Clubs, and several organization of printers, converters of paper, and wholesale groups, all of whom are interested in paper.

The advertising convention alone is expected to attract ten thousand advertising men and women. Because of the thickly populated districts extending in all directions from Philadelphia and within easy reach by train and automobile of the exposition grounds, authorities estimate the attendance at between twelve and twenty-five millions of people.

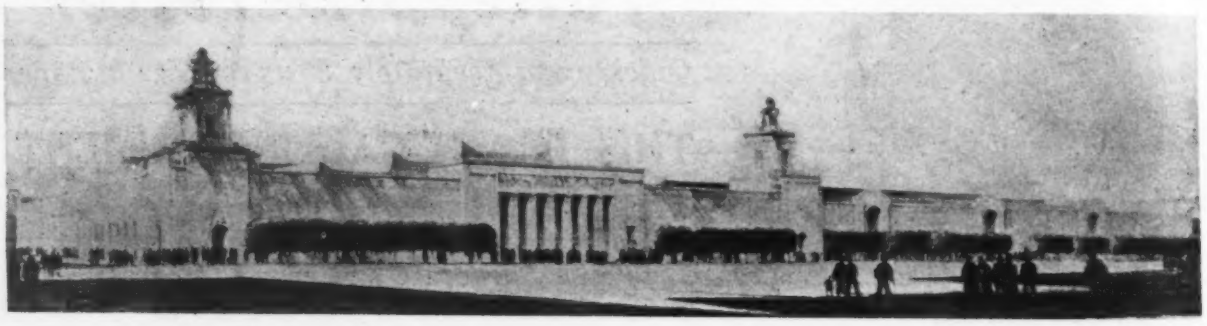
In discussing the plans details were given of the general exhibit for the paper industry, which calls for a central historical exhibit to be built around a replica of the old Rittenhouse Mill on the Wissahickon, and the first paper mill in America.

Then there is to be a showing of modern methods and machinery, to comprise either a model machine in operation, or a general exhibit supported by moving pictures of various American mills and processes. It is also planned to have bag machines and envelope machines in operation, and, of course, displays of all kinds and grades of paper and paper products.

Dard Hunter to Have Charge

After outlining the plan, Chairman Walter called on Norbert A. Considine, another member of the committee who had prepared the plans for the historical exhibit, to explain them in detail. Mr. Considine announced that he had arranged to secure the services of Dard Hunter, of Chillicothe, Ohio, who has a world-wide reputation as an authority on old paper making processes, papers, watermarks and equipment, to take complete charge of the historical end of the exhibit.

Dard Hunter arranged the paper exhibit in the Smithsonian Institute in Washington. He produced a most interesting showing of the manufacture of paper by hand at the paper show in New York a few years ago, he owns several of the original molds and watermarks used in the old Rittenhouse Mill and he is quite enthusiastic about the possibilities of reproducing the first paper mill in America, making paper in it day by day throughout the exposition, with the same watermarks as were used by Benjamin Franklin in pre-revolutionary days.



LIBERAL ARTS PALACE FOR THE SESQUI-CENTENNIAL INTERNATIONAL EXPOSITION

Contract for the erection of this building was awarded last August, and will be completed in 75 working days. Building will contain approximately 375,000 feet of floor space. To the south it will face the Great Tower, to be erected between the Liberal Arts Palace and the Palace of Agriculture, each of which will be connected by double colonnades. In this Building will be exhibited the Paper Trade displays of the Industry.

Plans Meet With Enthusiastic Support

These plans met with the enthusiastic approval of the association. It is believed that an exhibit of this kind will attract a great deal of popular attention, as nothing like it has ever been shown. The association instructed Mr. Considine to proceed with the plans as outlined, and immediately guaranteed a sum of money sufficient to cover the expense of this part of the project.

David Lindsay, Jr., and Arthur B. Sherrill, who are also members of the committee, reported on various phases of the exhibit, including the financing, personnel of attendants, Distribution of space, and means of enlisting the co-operation of the manufactur-

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These Economizers will all be in use before cold weather is over.

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ing interests and particularly those who are large national advertisers.

If sufficient finances cannot be arranged to cover the rather expensive proposition of installing and operating a model paper machine, which would be particularly interesting if the machine were placed in a booth adjoining the hand made display, thus contrasting the old and new methods of manufacture, the committee planned a moving picture booth wherein those manufacturers who have displays of their plants to show could have an opportunity of presenting them to the public.

Booths for Paper Concerns

Surrounding this central exhibit will be grouped a series of small booths which can be used by individual firms in the paper field. Fine papers will have one side; wrapping papers, bags, and novelties the other.

To the north will be the printing and publishing exhibit, plans for which are rapidly maturing. To the west will be the radio exhibit, with the great display of the American Telephone and Telegraph Company, immediately adjoining the entrance to the paper section.

At the A. T. & T. display there will be in operation the newly developed machine for transmitting pictures by telegraph. This is sure to attract a great deal of popular interest and will attract crowds to the section of the exposition occupied by the paper show.

To Lay Plans Before Paper Trade

The Philadelphia Paper Trade Committeee hopes to have an opportunity of laying its completed plan before President Wilson of the American Pulp and Paper Association next week. Following that and with his approval, the committee hopes to take the entire program to the manufacturers of pulp, paper and kindred lines within the next two weeks so that the space can be contracted for at once.

The Liberal Arts Palace is the first building to be completed. It is only natural, therefore, that space in it should be the first to be sold. The paper trade committee was surprised to find so little space in a good location available, so they immediately placed a binder on as much as could be secured. This option, however, is good only for a week or ten days, so that prompt action is necessary.

Buys J. A. Rupp Paper Co.

ALLENTOWN, Pa., February 8, 1926.—Martin Kemmerer, member of the J. A. Rupp Paper Company, has announced his purchase of the interest of John A. Rupp in the firm and his intention of carrying on this wholesale paper business as an individual from this time on. A change in the name of the business may be made, but announcement will be made as to this later on, should a decision in this direction be reached.

The business of the J. A. Rupp Paper Company was founded about fifteen years ago by Mr. Rupp and business was done on South 8th Street. Mr. Kemmerer became a partner about eight years ago and the firm then moved to the fine building at 355-357 Hamilton street, which Mr. Kemmerer built especially for the purpose of the business, it being a fireproof structure of ample proportions and admirably adapted in every way to the handling of the large volume of business which the firm enjoys.

Under the co-partnership the business has steadily progressed, becoming one of the largest paper houses in this part of the State. On account of other interests Mr. Rupp recently decided to sell his share in the business to Mr. Kemmerer, who now becomes the sole owner.

The firm covers this entire territory, handling the finest and most complete lines of paper goods for business and domestic use, office supplies, school supplies and stationery. A crew of five salesmen who work out from this city into all parts of Eastern Pennsylvania, is under the direction of Charles Fulmer, the sales manager.

Speaks on Plans for Alaska Paper Mills

KETCHIKAN, Ala., February 2, 1926.—At the Ketchikan Commercial Club luncheon last Wednesday Dr. P. Lifingstone Barnes, representative of a group of outside interests of the new pulp and paper project of the Alaska Paper Mills, to be located in Thorne Arm, 24 miles south and east of Ketchikan, brought out some salient facts regarding the purposes of the new concern that are of very lively interest to Ketchikan residents.

The doctor emphasized the fact that it is not the intention of the interests he represents to operate a "company town". It will be essentially an open town, primarily to afford living accommodations for the hundreds of workmen that will be employed in the logging operations and paper mill. Excellent sanitary conditions are to be of first importance, Dr. Barnes states; the health of the workmen will receive considerable attention; the housing facilities will be most modern and convenient, with electricity for every place that it is possible for it to be employed.

Ketchikan's business houses will have the bulk of the business, according to the plans of the company, and if the town should assume sufficient greatness to warrant it, they will be asked to establish branches in Southport. But frequent boat service will be established and probably a new government highway built in order to provide the best and quickest communication to the First City, allowing the mill and woods employees to shop "in the city."

A base is now being established at Southport and H. P. Cope, townsite manager for the Alaska Paper Mills, is on the ground with his family, attending to the erection of temporary homes for the gradually increasing force of men engaged in the work of making ready for the larger effort of the near future.

Pollock Paper & Box Co. to Build

DALLAS, Tex., February 6, 1926.—Contract has been awarded to the W. G. Davis Construction Company of Dallas for the erection of a new plant building for the Pollock Paper and Box Company, to occupy the block bounded by South Lamar, Alma, Wall and Henning streets in South Dallas, work on which will begin immediately. The building will be two stories in height, with basement, and will be located on service tracks of the Cotton Belt Railroad. It will cost about $150,000, and will be equipped with $50,000 worth of additional machinery for the manufacture of paper and paper box products. Offices of the Pollock Company and its wax paper manufacturing plant at Griffin and Broom streets will be removed to the new structure. The building is expected to be completed by May 1.

The Pollock Paper and Box Company was organized in 1918, employing at that time but nine people. It was consolidated with the Pollock Paper Company in 1923, with offices and warerooms at Lamar and Caruth streets and a plant at Griffin and Broom streets. More than 100 people are now employed, and this number will be increased when the new plant is completed. Sales have increased from $24,000 in 1918 to more than $600,000 in 1924.

This new department with the company's present manufacturing facilities should enable the firm to produce every item in the paper and box line which has been the ambition of Lawrence S. Pollock, president and general manager, ever since the business was started in 1918. The company will, of course, continue to operate its coarse paper department.

The new building will have 70,000 feet of floor space. It was designed by Arthur A. Brown.

To Begin Work on Liverpool Mill in Spring

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., February 8, 1926.—Frank J. D. Barnjum announces that he has completed arrangements for the erection of the promised $5,000,000 news print mill at Liverpool, N. S., and that work will be commenced in the spring.

The Type "E" Stoker

Rear view, with some bars removed. A special feature of the Type "E" Stoker is the adjustable spring pressure employed to compensate for expansion of grate bars due to heating. This adjustment like all others on the Type "E" Stoker is made from the front.

Pioneer

Self-Clearing

Single Retort

Underfeed

Stoker

Some important advantages of Type "E" Stoker:

1. **Simple in design and operation**
2. **Easily and quickly installed**
3. **Deep ash pits not required**
4. **Air cooled grate bars**
5. **Active part of fire continuously self cleaning**
6. **100% acting fuel burning surface**
7. **Capable of high continuous ratings**
8. **Will burn refuse fuels**

In plant of large paper company, 6 Type "E" Stokers under 4-400 h.p. B. & W. and 2-410 h.p. Edge Moor Boilers. Type "E" Stokers may be applied to existing boilers with but little change in boilers settings.

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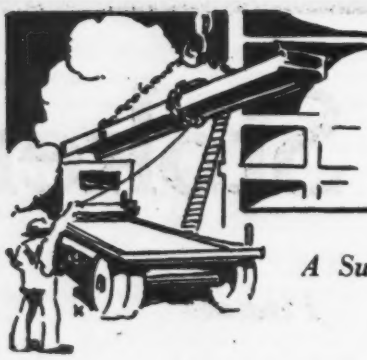


CONSTRUCTION NEWS

A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills

Construction News

Everett, Wash.—The Everett Pulp and Paper Company is pushing construction on its new mill units and has awarded miscellaneous contracts for roofing and other finishing work. It is purposed to have the plant ready for service at an early date. It is understood that a number of contracts have been placed for equipment, and that other orders will be given out later.

Buffalo, N. Y.—The Midland Paper Box Company, 72 East Utica street, is said to be perfecting plans for the early rebuilding of the portion of its plant recently destroyed by fire. The work is estimated to cost close to $45,000, with equipment.

St. Louis, Mo.—The Federal Paper Stock Company, 1814 North Main street, has acquired a site at McKissock avenue and Gano street, and has tentative plans under consideration for the erection of a new plant for storage and distributing service, estimated to cost approximately $90,000, with equipment.

Norwich, Conn.—The plant and property of the Uncas Paper Board Company, in receivership for some time past, has been acquired by John G. Kerry, Montreal, Que., paper mill operator, and associates, for a consideration of $250,000, the minimum figure established by the court for the public sale. The property consists of a tract of seventeen acres of land, with about 1,000 feet of dock frontage on the Thames River, including mill buildings and other structures, with an appraised valuation of $1,000,000. The new owner proposes to reorganize the company and will continue the plant in operation. Improvements will be made. Mr. Kerry is represented locally by Frank McGuire, New London, Conn., an attorney.

Glendale, L. I., N. Y.—The Pequot Manufacturing Company, Thompson avenue, Long Island City, N. Y., manufacturer of corrugated boxes and containers, has awarded a general contract to the Austin Company, 120 Broadway, New York, for the erection of the initial unit of its proposed new plant on local site recently acquired. It will be one-story, 100 x 320 feet, reinforced concrete, reported to cost approximately $500,000, with machinery. Other buildings are projected in the near future, including a proposed paper mill unit.

Philadelphia, Pa.—The Keystone Papeterie Company, Inc., 315 North Twelfth street, manufacturer of paper specialties, has leased a floor in the building at the northeast corner of Thirteenth and Hamilton streets, and will establish a new plant at this location. It is said that the present works will be removed to the new site, with the installation of additional facilities for increased output.

St. Louis, Mo.—The Universal Match Company is reported to have acquired a tract of about ten acres of land on the main line of the Wabash Railroad, near St. Louis, as a site for a new plant for the manufacture of paper safety matches. Existing buildings will be remodeled and improved, with installation of machinery. A paper department will be installed. The initial works are estimated to cost approximately $80,000, with equipment.

Piermont, N. Y.—The Robert Gair Company, 50 Washington street, Brooklyn, N. Y., manufacturer of corrugated paper boxes and containers, has plans under way for the erection of a new plant at Piermont, comprising a main two-story and basement, reinforced concrete building, 160 x 345 ft., estimated to cost close to $300,000, with machinery. William Higginson, 15 Park Row, New York, is architect and engineer, and will ask bids on general contract at an early date.

San Francisco, Cal.—The Traung Label and Lithograph Company, 962 Battery street, manufacturer of paper labels and other paper products, has plans under way for the construction of a new plant on Pacific street, between Battery and Front streets. It will be two-story, reinforced concrete, estimated to cost about $150,000, including equipment. Work is expected to begin in the near future. Couchot and Rosenwald, 60 Sansome street, San Francisco, are architects.

Wheeling, W. Va.—The No-Leak Paper Dish Company has work under way on a new plant at Thirty-seventh and McColloch streets, for the manufacture of paper and cardboard specialties, designed to replace a works recently destroyed by fire. It will be three-story, 50 x 92 ft., estimated to cost about $25,000. New equipment will be installed. General contract for erection has been let to R. B. Keffer, Warwood, W. Va. E. T. Maxwell is president.

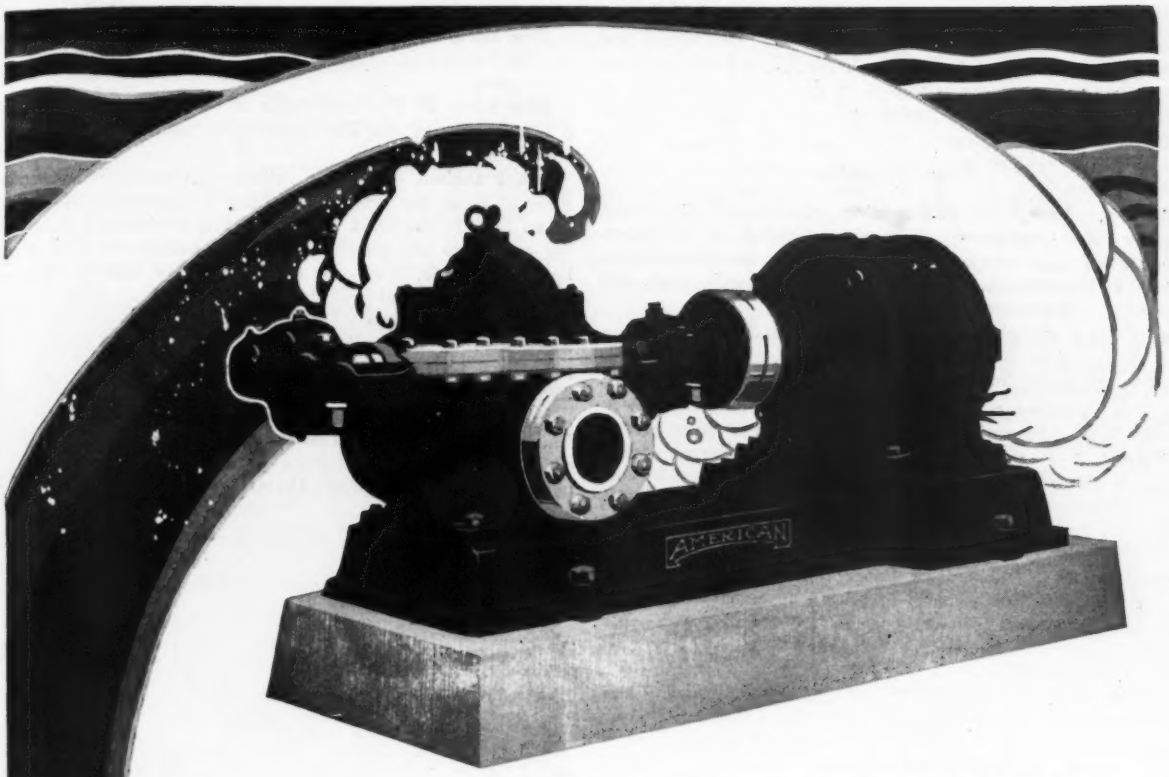
Chicago, Ill.—John P. Lynch, care of D. D. Meredith, 431 South Dearborn street, architect, has completed plans and will proceed with the erection of a new paper-box manufacturing plant at 3403-15 West Grand avenue. It will be one-story, 145 x 175 ft., estimated to cost close to $65,000, with equipment, list of which will be arranged at an early date.

Salem, Mass.—The L. B. Philbrick Company, Salem, wrapping papers, paper bags and conainers, etc., has acquired through an affiliated organization, the Philbrick Reality Company, the property at Bridge and St. Peter streets, known as the Harris site, and is reported to be planning to use in connection with its business.

Long Island City, N. Y.—The Hygrade Corrugated Paper Products Company, Inc., Manley avenue, is completing the erection of a new plant occupying a block of land at Hunters Point and Anable avenues, and Orton street, three-story, with a ground area of about 50,000 sq. ft. The company will remove its present plant to the new location, where it will be considerably extended for large increase in output. The complete project will represent an investment close to $1,000,000.

Shawinigan Falls, Que.—The St. Maurice Valley Corporation has plans under way for extensions in its local paper mill, including the erection of two new units, estimated to cost close to $1,000,000 each, with machinery. It is expected to develop large increase in output. H. Sorguis, Shawinigan Falls, is engineer in charge.

Kapuskasing, Ont.—The Spruce Falls Pulp and Paper Company, a subsidiary of the Kimberly-Clark Company, Neenah Wis., is perfecting plans for the early erection of a new pulp and paper mill in the vicinity of Smoky Falls, Northern Ontario, to consist of a number of units, with machine shop, power station, and other mechanical buildings, estimated to cost in excess of $10,000,000. It is purposed to develop an initial capacity of 500 tons per day. The company has acquired extensive timber lands from the Provincial



District Sales Agencies:

Philadelphia, Pa.
Pittsburgh, Pa.
Cleveland, Ohio
Detroit, Mich.
St. Paul, Minn.
Omaha, Neb.
St. Louis, Mo.
Kansas City, Mo.
Joplin, Mo.
Atlanta, Ga.
Birmingham, Ala.
Jacksonville, Fla.
New Orleans, La.
Roswell, N. Mex.
Denver, Colo.
Salt Lake City, Utah
Phoenix, Ariz.
Los Angeles, Calif.
Charlotte, N. C.
Calgary, Alta., Can.
Edmonton, Alta., Can.

"American" pumps are husky in design. All bearings are of generous proportion. Each type is compact. Wide footings and ample bases give great rigidity. Hydraulic efficiencies are high. And each "American" pump is absolutely guaranteed for the service for which it is recommended!

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New York, N. Y. .....165 Broadway
Dallas, Texas .....Western Indemnity Bldg.
San Francisco, Calif. .....635 Mission Street

AMERICAN
AURORA, ILL.

Government on the Ground Hog and Mattagami Rivers, and will install a plant for raw material for pulp supply. It is also proposed to construct a new logging railroad in this section, with line as well from Kapuskasing to Smoky Falls, about 50 miles. J. H. Black is general manager.

New Companies

Shelton, Conn.—The Connecticut Corrugated Container Company has been incorporated, with a capital of $50,000, to manufacture paper containers, boxes, etc. The incorporators are Harold E. Drew and A. E. Lindholm, both of Ansonia, Conn., and George H. Gamble, Derby, Conn.

New York, N. Y.—The Container Patents Corporation has been incorporated with a capital of 100 shares of stock, no par value, to manufacture paper boxes, containers, and kindred specialties. The incorporators are D. H. Starks, G. C. Phillips and F. A. Zunino, 59 Wall street, New York. The last noted is representative.

Newark, N. J.—Boxcraft, Inc., has been incorporated with a capital of 100 shares of stock, no par value, to manufacture paper and cardboard products. The incorporators are Samuel Sharinn, Harold F. Cunningham and Greenville C. Abernethy, 951 Broad street, Newark. The last noted is representative.

Brooklyn, N. Y.—The Park Paper Box Mfg. Company has been incorporated with a capital of $10,000, to manufacture paper boxes and containers. The incorporators are J. Filler, A. Krieger and J. Bennett. The company is represented by Harry Grayer, 44 Court street, Brooklyn.

Boston, Mass.—The G. F. Howard Paper Box Company has been incorporated, with a capital of $25,000, to manufacture paper boxes, containers, etc. Gerald F. Howard, 1665 Commonwealth avenue, Boston, is president and treasurer.

Providence, R. I.—The Saillant Paper Products Company has been incorporated with a capital of 1,000 shares of stock, no par value, to manufacture and deal in paper goods. Emile M. Saillant, 11 Wheeler avenue, Cranston, R. I., is the principal incorporator.

La Grange, Ill.—The Central Paper Company has been incorporated with a capital of $10,000, and 200 shares of stock, to manufacture and deal in paper products. The incorporators are William Rademacker and C. F. Grazely. The company is represented by Francis W. Peterson, 112 West Adams street, Chicago, Ill.

Paterson, N. J.—The Textile Paper Company has been incorporated with a capital of $25,000, to manufacture special paper products. The incorporators are Frank H. Greene and Jacob Stam, 140 Market street, Paterson. The last noted is representative.

Boston, Mass.—The Strecker Press and Envelope Company has been incorporated with a capital of $50,000, to manufacture and deal in paper specialties. Julius Strecker, 289 Congress street, Boston, is president and treasurer.

Hartford, Conn.—The Hoffman Wall Paper Company has been incorporated, with a capital of $200,000, to deal in wall paper and kindred products. The incorporators are Abraham and Samuel K. Hoffman, and Nathan G. Harris, 75 Ridgefield street, Hartford. The last noted is representative.

Financial

Brooklyn, N. Y.—The Simplex Paper Accessories Company, 148 Thirty-ninth street, has filed notice of company dissolution under state laws.

New York, N. Y.—The Castanea Paper Company, 200 Fifth avenue, a Delaware corporation, has filed notice of increase in capital from $15,600,000 to $18,600,000, for general expansion.

New York, N. Y.—The Shulman-Adler Paper Company, 88 White street, has filed notice of company dissolution under state laws.

New York, N. Y.—Vincent T. Follmar, receiver for the Sander Paper Box Company, 2420 First avenue, has arranged for the sale of the machinery, stock and property of the company.

New York, N. Y.—The Simon & Green Paper Box Company has filed notice of change of name to the Simon Patent Box Corporation.

New York, N. Y.—The Mapes Paper Products Corporation, 6 Harrison street, has filed notice of company dissolution under state laws.

San Francisco, Cal.—The Zellerbach Corporation, manufacturer of paper products, is perfecting arrangements for the sale of an issue of preferred stock, a portion of the fund to be used for extensions and betterments. The company will build a new branch at Seattle, Wash., for which plans have recently been completed. A newsprint mill is being operated at Port Angeles, Wash., with capacity of 140 tons per day; a boxboard mill at Stockton, Cal., with rating of 200 tons per day; while a tissue paper mill is maintained at Carthage, N. Y., with capacity of 35 tons daily.

Warsaw, Ind.—The Illinois Paper Box Company, Chicago, Ill., has filed notice of organization to operate in Indiana with a capital of $25,000, for the manufacture of paper boxes and containers. J. Edward Headley, Warsaw, represents the company.

New York, N. Y.—The Whitehall Paper Mills, Inc., 51 Chambers street, has filed notice of dissolution under state laws.

Cost Convention Program

At a recent meeting of the executive committee of the Cost Association of the Paper Industry, it was arranged to hold the following sessions during Paper Week at the Waldorf-Astoria Hotel, New York:

TUESDAY, FEBRUARY 23

2:00 P. M.—A joint meeting with the Technical Association of the Pulp and Paper Industry, who have kindly invited the Cost Association members to attend this session and hear the report of their Waste Committee on the following subjects: "Paper Mill Waste and Stream Pollution," and "White Water Treatment," by Noel Cunningham.

4:30 P. M.—"A New Step in Pulp Screening," by A. J. Hoag, to be followed by a discussion.

WEDNESDAY, FEBRUARY 24

9:30 A. M.—Business meeting.

10:30 A. M.—"Predetermined or Standard Costs as Applied to Paper Mills," by C. R. Stevenson, of Stevenson, Harrison and Jordan, New York. Discussion.

11:30 A. M.—"The Value of the Cost Bureau," by J. C. Oswald, United Typothetæ of America.

12:30 P. M.—Executive luncheon meeting. Chairman, Col. B. A. Franklin; speakers, Mortimer B. Lane, editor, *Survey of Current Business*, Bureau of the Census, Department of Commerce, "Statistics as an Aid to Industry"; J. W. Richmond, vice-president, Irving Bank-Columbia Trust Company, New York, "What Your Banker Wants to Know About Your Statement"; F. L. Stevens, president, Stevens and Thompson Paper Company, North Hoosick, N. Y., "Costs from an Executive Viewpoint."

A session will also be held beginning 2:30 P. M., details of which are to be announced later.

New Paper Concern for Greensboro, N. C.

[FROM OUR REGULAR CORRESPONDENT]

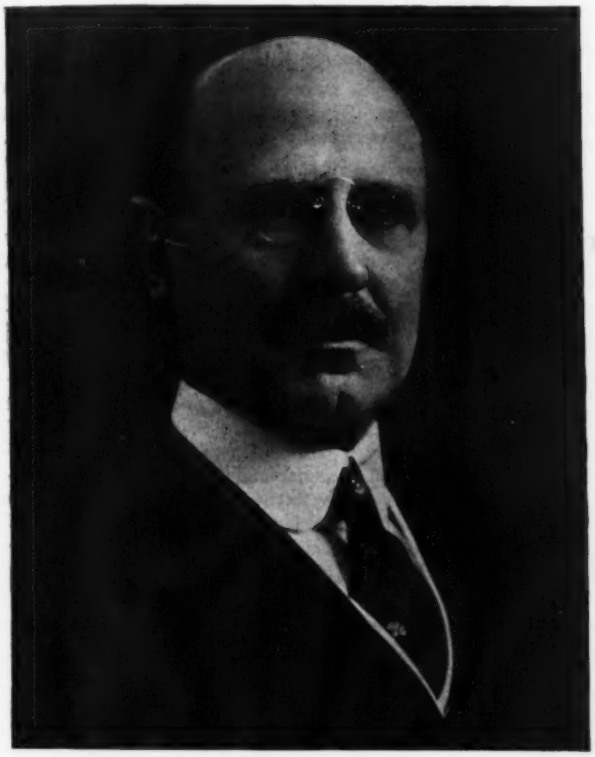
GREENSBORO, N. C., February 6, 1926.—The Dillard Paper Company is opening a wholesale paper establishment at 339 South Davie street.

The company has been granted a charter by the Secretary of State. The authorized capital is $100,000, with $35,000 paid in. Stark S. Dillard, who has been connected with Caskie-Dillard company, of Lynchburg, Va., and Charlotte, will be actively in charge of the plant. Associated with him will be his brother, D. S. Dillard, of Lynchburg, Va. D. S. Dillard will not be actively engaged in the business.

To Increase Pulpwood Output

[FROM OUR REGULAR CORRESPONDENT]

TRONTO, Ont., February 6, 1926.—The Thompson & Heyland Lumber Company will this season purchase and handle about 125,000 cords of pulpwood, which is an increase of about 25 per cent over last year. The company has some fifteen portable rossers operating along the line of the Canadian National Railways from Cochrane west to Hearst, a distance of 130 miles. A branch office is maintained at Cochrane, in charge of W. H. Hartford, general superintendent of the company, which is now



L. R. WILSON

President, Canadian Pulp and Paper Association

shipping out about five hundred cords a day to the mills in Southern Ontario, Canada; New York, Ohio and various other states in this country.

The Thompson & Heyland Lumber Company is handling about 50,000 cords of peeled poplar, which is being forwarded to mills in Pennsylvania and New York. During the peeling season of June, July and August in 1925 there was not as much peeled spruce and balsom taken out as usual by the settlers in Northern Ontario owing to the demand from the paper mills at that time being light. The market, however, has strengthened some of late and the prospects are brighter, with the exception of peeled poplar, of which there is reported to be a surplus at the present period of time.

Prices on most lines of pulpwood are a little easier than a year ago. The hauling of wood to the stations along the T. & N. O. and Canadian National Railway, where the product is loaded on the cars, started only a few days ago, owing to there not being sufficient snow in the bush during the earlier part of the winter. Rough spruce north of North Bay has been purchased during the past season at $5 to $6 f. o. b. cars. Other prices paid for pulpwood are as follows: Peeled poplar, $5 to $6.50 north of North Bay and $7 to $8.50 south of North Bay; peeled balsam and spruce, $7 to $8 north of North Bay, $10 to $11, south of North Bay, according to freight rates, etc.

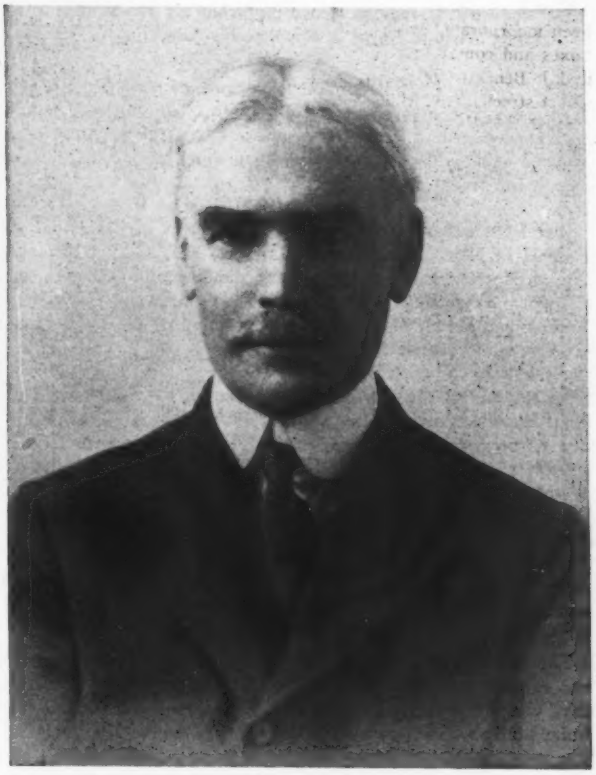
Declares Pulpwood Embargo Would be Ruinous

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, February 6, 1926.—At the annual meeting of the Canadian Pulpwood Association, held in Montreal during the week, it was reported that there had been phenomenal strides in membership growth, which was considered indisputable evidence of the widespread opposition to a pulpwood embargo, export tax, or any restrictive legislation that would interfere with the members selling their product in the best markets of the world.

Angus McLean, president of the association, who is also president of the Bathurst Company, Ltd., of Bathurst, N. B., the largest manufacturers of paper in the Maritimes, a member of the executive of the Canadian Pulp and Paper Association, and a past president of the Canadian Lumbermen's Association, presented a resume of the activities of the association during the year. He spoke of the educational work done in opposition to an embargo. or export tax on pulpwood.

He expressed the belief that the agitation for such restrictive legislation was steadily losing ground, and went on to say that in the province of New Brunswick, in which he was particularly interested, an embargo would literally ruin thousands of individuals; there was no necessity for any such legislation and large quantities of pulpwood were today rotting because there was not a sufficiently



EDWARD BECK

Secretary, Canadian Pulp and Paper Association

wide market, even with free access to the American mills.

Angus McLean was re-elected president of the association for the ensuing year. Other officers elected are as follows: Vice-presidents, Armand G. Auger, of Auger & Son, Ltd., Quebec; Ralph P. Bell, of Halifax; and James Thompson, of Thompson and Heyland Lumber Company, Ltd., Toronto. Executive: J. O. Auger, Quebec; Joseph Crogan, Quebec; C. E. D'Auteuil, Quebec; J. O. Amyot, Quebec; Ephrem Lagueux, Tring Junction; E. W. Perras, Gracefield; W. Roy Smith, Annapolis Royal; R. Girouard, Smith's Falls; Charles E. Clowes, Fredericton; J. B. Kemp, Pembroke, and Walter Russel, Port Arthur.

New York Trade Jottings

The Campbell Trading Company, Inc., have removed from 154 Nassau street to more convenient quarters at 30 East 42nd street, New York.

* * *

The E. M. Sergeant Company, specialists in chemicals and wood pulp, have removed from 131 Cedar street, to larger and more convenient offices at 501 Fifth avenue, New York.

* * *

R. S. Kellogg, secretary of the News Print Service Bureau, with offices at 342 Madison avenue, New York, announces that Wayagamack News, Ltd., has been elected to membership of the organization.

* * *

The Hudson Trading Company, paper and pulp importers, of 270 Madison avenue, New York, of which Benjamin Gottesman is the vice president, have been elected to membership of the Merchants' Association of New York.

* * *

Word comes from Nice that Philip T. Dodge, president of the Herkimer Fibre Company, who has many friends in the New York paper industry, is rapidly recovering from his recent illness, and is planning a trip to Egypt to complete his recuperation.

* * *

The Uptown Card and Paper Company, of 1908 Park avenue, New York, is composed of William Lipshitz and Bernard Josephson, experienced paper men and printers, and the company is organized for the purpose of dealing, jobbing, and acting as mill agents for paper concerns.

* * *

The next meeting of the Paperboard Industries Association will be held in New York between March 23 and 25. On Tuesday, March 23, there will be a meeting of standing and executive committees. A meeting of the individual groups will be held on Wednesday, March 24, and a general meeting of the three groups on Thursday, March 25.

* * *

At the annual meeting of the Association of American Wood Pulp Importers, held at the Uptown Club, New York, on February 4, the following officers were elected for the ensuing year: President, Hans Lagerloef, Lagerloef Trading Company; vice president, Orval A. Wales, Johaneson, Wales & Sparre, Inc.; secretary, S. Willey, Nilsen, Lyon & Company, Inc.; treasurer, W. H. Anders, Perkins-Goodwin Company; director, J. F. Patton, Mead, Patton & Company, Inc.; national councilor, H. E. Atterbury, Atterbury Brothers; and sub. national councilor, J. A. Millar, Scandinavian Pulp Agency, Inc.

* * *

The Naval Stores Dealers of New York announce to consumers and exporters of naval stores in the Metropolitan district that the third annual get-together meeting of the naval stores trade will be held in New Orleans, March 1, 2 and 3 at the St. Charles Hotel. The two previous meetings were held in Savannah. Both meetings held in Savannah were well attended by representatives of the paint, varnish, soap and paper trades. It was and will continue to be to their advantage to attend. Eligibility is simply having some interest in naval stores as a producer, factor, dealer, broker, exporter or consumer. Fee, nominal charge for registration. Benefits, many or the usual that are derived from such trade associations as the national paint, oil and varnish clubs. The naval stores meeting precedes the southern zone meeting of national paint, oil and varnish clubs. Individuals contemplating making the trip have suggested a private pullman attached to the "Crescent Limited," leaving New York via Pennsylvania Railroad at 6:40 p. m., February 26, due in New Orleans 8 a. m., February 28. C. F. Guignon, acting secretary, Room 1224, 2 Rector street, telephone Whitehall 5277, would appreciate hearing from those expecting to make the trip, even though they do not propose to travel as suggested.

Paper Makers Brotherhood Activities

[FROM OUR REGULAR CORRESPONDENT]

ALBANY, N. Y., February 8, 1926.—The International Brotherhood of Paper Makers has decided to continue the Canadian Bureau established at Three Rivers last fall, according to a statement from Brotherhood headquarters in Albany. The organizing of the men in the mills at Three Rivers and elsewhere in Canada will continue and in all probability Frank P. Barry, one of the vice presidents of the union will be returned to the Canadian Bureau. Mr. Barry for the last few days has been located in Holyoke, Mass.

At the annual meeting of the stockholders of the Papermakers' Building in Albany, which serves as the headquarters of the International Brotherhood of Papermakers, William R. Smith, head of the Brotherhood, was elected president and Matthew J. Burns, secretary.

In deciding to conduct an aggressive membership campaign International Brotherhood of Papermakers hopes to regain its old time strength during the coming year. It is a well known fact that the membership of the union dropped sharply during the International strike and also that several hundred names were wiped off the books some time ago, having been carried along for several years. Organization work will be done in the mill towns of Maine and other places where the Brotherhood has lost strength.

The International Brotherhood of Papermakers who recently sent out invitations to paper manufacturers to attend the Montreal wage conference in March, has received replies from a number of the manufacturers stating their intention to attend or send representatives. Several of the manufacturers, in their replies, complimented the Brotherhood on the spirit of co-operation being shown and while others stated in their letters that they have nothing of special importance to bring before the conference, they will be represented, nevertheless.

Salesmen's Convention Arrangements

The Salesmen's Association has an opportunity to present to the members of the association, the executives of their companies, and to their customers, a remarkable program at the Seventh Annual Banquet which takes place at the Waldorf-Astoria, February 23, at 7 p. m.

Through the effort of their president, Walter E. Perry, they have secured two speakers, one nationally known and one widely known throughout New England. The former is the Hon. Allen T. Treadway, representative in Congress for Hampden and Berkshire counties, Massachusetts, the largest fine paper making section in the country. Mr. Treadway, by reason of his splendid work on the Ways and Means Committee in framing the tariff, has contributed largely to the present day prosperity of the paper industry, due to the favorable rates in the last tariff act. He is a speaker of repute excelled by no member of Congress today.

The second speaker is the Rev. James Gordon Gilkey, D.D., of Springfield, Mass., a modern thinker and a straightforward talker on modern conditions. His sermons are broadcast from Springfield and he is rapidly becoming a rival of Dr. Cadman in the number of his hearers.

The New York Committee has been gratified by the reservations which have come in already. The banquet promises to be the largest and most successful in the history of the association.

Kurt Wandell Resigns From I. P. Co.

[FROM OUR REGULAR CORRESPONDENT]

GLENS FALLS, N. Y., February 8, 1926.—Kurt Wandell, who has been in charge of the new "celluflex" process at the Fort Edward mill of the International Paper Co., has resigned his position and severed connection with the I. P. Co.

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PAPER
The Magazine of the Paper Industry
HENRY J. BERGER, Editor

Member A. B. C. Audit Bureau of Circulations

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COMING EVENTS

American Paper and Pulp Association, Convention and Meeting of Affiliated Associations, Waldorf-Astoria. February 22-25. Annual Banquet, Grand Ball Room, Thursday, February 25.

National Paper Trade Association, Convention, Waldorf-Astoria, February 22-24. Annual Banquet, Grand Ball Room, Wednesday, February 24.

Technical Association of the Pulp and Paper Industry, Convention, Waldorf-Astoria, February 22-25. Annual Banquet, Hotel Commodore, Tuesday, February 23.

Salesmen's Association of the Paper Industry, Convention, Waldorf-Astoria, February 23. Annual Dinner, Roof Garden, Tuesday, February 23.

EXPORTS OF PAPER EXPAND

Exports of paper and board from the United States during December reached a total value of $2,328,969, thus exceeding any other month during 1925 and incidentally any month since the early part of 1921, according to the Paper Section of the Department of Commerce.

The volume of shipments of practically all classes were higher than during the preceding December, exceptions being wall boards, paper hangings, and miscellaneous paper and paper products. The chief increases were registered in shipments of paper board and strawboard, including box boards, which increased by 100 per cent; writing paper, which increased by 130 per cent; carbon, paper, photographic paper, boxes and cartons, surface coated paper, tissue and crepe paper, and news print. Exports of book paper again showed some improvement, the December exports exceeding those of the previous month by 40 per cent, and of December, 1924, by 6 per cent. The total shipments during December were 11 per cent above those of November, and 31 per cent above those of December, 1925.

Exports of paper base stocks during December amounted to a total of 8,788 tons, and were valued at $383,446. This is a rather substantial decrease under the November shipments, amounting to 2,497 tons, valued at $47,884, and also under the shipments during December, 1924, which aggregated 10,225 tons, valued at $10,989.

Imports of paper and board into the United States during December, which were valued at $10,075,170 show a slight decrease in comparison with November and also with December, 1924, due largely to a reduction in receipts of news print paper. Imports of other classes of printing paper, and of wrapping paper, hanging papers, paper boxes and miscellaneous papers, also fell off to some extent. Excluding news print, which comprises from 85 to 90 per cent of the total receipts, imports of paper and paper products during December were slightly in excess of those for the corresponding month of 1924. Outstanding increases were in greaseproof and waterproof papers, surfaced coated paper, photographic paper, cigarette paper, and boards.

There was a general falling off in receipts of paper base stocks compared with the same month in 1924, imports of mechanical ground wood and of old rope and similar paper stock being the only items to register an increase. Sulphite receipts were somewhat better than in November, but nevertheless failed to reach the level of the December, 1924, receipts by 15 per cent. Imports of paper base stocks of all classes during the month under review reached a total of 155,760 tons, and were valued at $8,565,634, a decrease in both quantity and value of approximately 10 per cent compared with December, 1924.

During the same period 71,832 cords of pulpwood, valued at $696,934, were imported, this amount representing a decrease in quantity of 8 per cent, and in value of 14 per cent, compared with the same month in 1924.

The increased value of the December shipments of paper and board was more than sufficient to bring the value for the calendar year above the level of the 1924 exports. Exports of nearly all classes of paper and board shared in this increase, with the principal gains registered in news print paper, sheathing and building papers, carbon paper, wrapping papers, paper bags, paper boxes and cartons, tissue and crepe papers, surface coated paper, and photographic paper. Exceptions were paper boards and strawboard, including boxboard, which fell off $393,000 in value; wall boards, which decreased by $104,000; and book paper and cigarette paper, each of which decreased $144,000 in comparison with 1924. The only other decreases occurred in shipments of writing paper, which fell off 8 per cent in volume, although showing a small increase in the aggregate value of the shipments, paper hangings, and miscellaneous papers and paper products. The total value of paper and board shipments during 1925, according to preliminary statistics, amounted to $24,334,339 in comparison with $22,823,135 during the year 1924.

Imports of paper base stocks into the United States during 1925 registered a substantial increase, the total value, $103,665,132, exceeding that of 1924 by 10 per cent. All classes, with the exception of bleached sulphate and old rope and similar stock, shared in this increase, with the greater proportion going to imports of mechanical groundwood and unbleached sulphate pulp, which were approximately 40 per cent higher than in 1924. Imports of pulpwood, which amounted to 1,483,231 cords, valued at $15,129,562, were also greater than in the preceding year.

Receipts of paper and board, however, show but a slight increase, the total for the calendar year reaching a value of $119,991,387 in comparison with $118,316,451 in 1924. Of this amount, $103,717,055 represents receipts of news print, which totalled 1,448,425 short tons, an increase of 91,192 tons, and of $2,420,000 over imports during the preceding year. Other classes of paper and board of which the United States took increased amounts during 1924 were greaseproof and waterproof paper, writing paper, surface-coated paper, tissue paper, and photographic paper. The increase in these classes, however, was insufficient to offset the losses in other lines paper and board imports, excluding news print, having fallen off 4 per cent in value in comparison with 1924 receipts.

Many Conventions for Paper Week

Eighteen separate conventions of as many different paper making associations will be held during Paper Week, beginning February 22, at the Waldorf-Astoria Hotel, in addition to the general convention of the American Paper and Pulp Association, the central organization of the paper industry in the United States. The American Paper and Pulp Association is one of the oldest trade associations in the United States, and in another year will celebrate its fiftieth anniversary.

An important series of meetings will be held by the youngest association of the group, the Supply and Equipment Association, which begins its sessions on Monday, continuing for three days.

The American Paper and Pulp Association will change its historic policy of having its main convention session Thursday forenoon open to the public. The session on February 25th will be open only to representatives of mills which are members of the American Paper and Pulp Association, and invited guests.

The annual banquet of the American Paper and Pulp Association, to be held Thursday evening, February 25th, will be the culminating event of the week. The speakers, United States Senator Simeon O. Fess, of Ohio, and Dr. John L. Davis, of New York, will give both a serious and a humorous touch to the big dinner, at which there will be over 1,000 manufacturers and guests in attendance.

A condensed program of the week shows the following association meetings:

Monday—Technical Association of the Pulp and Paper Industry, Supply and Equipment Association, Southern Kraft Manufacturers Association.

Tuesday—Tissue Paper Manufacturers Association, Converting Paper Mills Association, American Waxed Paper Association, Salesmen's Association of the Paper Industry, Cover Paper Manufacturers Association, U. S. Pulp Producers Association, and a continuance of the Technical and Supply Association programs.

Wednesday—Writing Paper Manufacturers Association, Cardboard Manufacturers Association, Wrapping Paper Manufacturers Service Bureau, Woodlands Section of the American Paper and Pulp Association, Cost Association of the Paper Industry, Glazed and Fancy Paper Manufacturers Association, Paper Makers Advertising Club, and a continuance of the Technical, Supply and Southern Kraft Association programs.

Thursday—American Paper and Pulp Association, meeting and banquet, Binders Board Manufacturers Association, National Gummed Tape Manufacturers Association.

The Tuesday banquet of the Salesmen's Association will have as its chief speaker Congressman Allen T. Treadway, representing a paper making district of Massachusetts, who as a ranking member of the House Ways and Means Committee has had much to do with the formulation of the paper schedule in the present tariff act.

Blizzard Affects Boston Paper Trade

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., February 6, 1926.—Boston's paper trade was just developing a healthy February stride when the worst blizzard in years put a stop to everything, including the paper business, and up to this writing New England still is digging itself out of the snow. The latter part of the week brought in reports of mills being forced to shut down, salesmen being snow-bound and marooned in small towns. In addition Boston business was forced to come to a standstill, as all transportation facilities were paralyzed.

The first three days, however, proved that the rest of the month should be active. Especially busy were the fine grades houses, with orders being placed for Spring material. Houses handling stationery and correspondence cards, also greeting cards, are doing a good business, while the houses dealing with printers continue to do their best to fill orders from this source.

Wrappings and kraft also are moving well and paper box houses are beginning to feel the results of better business in the industrial centers. The raw stock division is lagging, but improved conditions are looked for by the end of the month. Prices remain firm, with no changes of importance announced during the week.

Bids and Awards for Government Paper

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., February 10, 1926.—The Government Printing Office has received the following bids for 40,000 pounds Wood Manila Tag Board, 14½x17½—35: R. C. Osburn Paper Company, 4.48 cents per pound; Barton, Duer & Koch Paper Company, 4.4 cents; R. P. Andrews Paper Company, 4.84 cents; Whitaker Paper Company, 4.33 cents; Dobler & Mudge, 4.3 cents; Reese & Reese, 4.415 cents; Lindemeyr & Harker, 4.76 cents; Maurice O'Meara Company, 4.55 cents; and Old Dominion Paper Company, 4.63 cents.

The Davey Company has been awarded the contract for furnishing the Government Printing Office with 70 sheets of 34x44 best quality trunk board at $2.00 per sheet, bids for which were received on January 22.

Dobler & Mudge have been awarded the contract for furnishing the Government Printing Office with 500,000 pounds of news print paper in 48-inch rolls at 3.69 cents per pound, bids for which were received on January 25.

The Eureka Specialty Printing Company will furnish 2,300 pounds (100 reams) of 17x22—23, white gummed paper at $3.40 per ream, bids for which were received on January 18.

The Mathers-Lamm Paper Company will furnish 1,000 pounds of 19x24—20, red stereotype molding paper at 14 cents per pound, bids for which were received on January 15.

To Build Paper Mill on Puget Sound

SEATTLE, Wash., January 28, 1926.—G. R. Birkelund, representing the Backus-Brooks company of Minneapolis, announced that at least one of three paper mills which his company is planning to construct on the North Pacific coast at a total expenditure of $30,000,000, is to be built on Puget sound.

The Backus-Brooks company is to proceed immediately with surveys for a hydro-electric plant on the Cowlitz river in Washington to develop 100,000 horsepower. This plant will cost approximately $8,000,000, Birkelund said.

The hydro-electric plant is to be located near Mayfield.

The company is seeking a site for its first big paper mill, which is planned to entail an additional investment of $10,000,000, making a total investment of $18,000,000.

"It is certain that we shall build at least one of the mills on Puget sound," Birkelund said. "We are frank to say that here appears the most logical place for establishment of a paper-making industry.

"Our plan is to feed a large part of our power into the transmission lines of the commercial power companies and then take it from those lines when we need it."

Kalamazoo Paper Box Co. Elects Officers

KALAMAZOO, Mich., February 8, 1926.—Robert E. Staebler has been elected president and general manager of the Kalamazoo Paper Box Company to succeed S. E. Giffert, retiring. For years Mr. Staebler has been treasurer and general manager of the concern.

This action took place at the annual meeting held Monday afternoon. Other officers named at that time are: Paul Staebler, assistant manager; Richard G. Staebler, treasurer; E. H. Distin, vice president; Miss Zola Whiting, secretary.

The Kalamazoo Paper Box Company is buying a considerable amount of new machinery, which will materially increase the concern's output.

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Section of the

Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G. MacNAUGHTON, Secretary

Paper Drying

The Barrus System: A Simple and Efficient Method of Draining Driers

By Herbert S. Kimball, Engineer, Boston, Mass.

The object of this simple and effective system is first to produce a continuous circulation of steam through the driers, so as to carry out the air which collects within them; and second to improve the conditions required for complete drainage of the condensed water.

An Engineering Problem

The Barrus system is in fact an engineering problem, which is carried out by simple additions to the exterior piping of the driers. The modifications are readily arranged. They are inexpensive and require hardly any attention.

Principal Features

The principal features of the system are best understood by an explanation of the simplest installation. One of the driers, known as the "waste steam drier," generally the first at the wet end, is heated by waste steam from the main driers; that is, the steam supply pipe for this drier is connected into the top of the main return header, at a point near the trap. The discharge from this drier is connected to the main return line, beyond the trap, which leads to the hot well or vacuum pump. The main body of the driers is connected with the main steam header in the usual way; and these driers discharge water, air and steam into the main return header. The drainage pipes from the driers to the return header, in new installations, may be of smaller bore than is commonly used; and in existing pipes they may be suitably restricted by the use of gate valves with the gate notched, or by inserting thin copper discs, with suitable orifices, in the pipe unions.

Waste Steam Dries Receiver Steam

The waste steam drier receives steam, or a mixture of steam and air, which has first passed through the main body of driers, being drawn from the top of the return header, as explained in the foregoing. As the main return header is trapped, no steam escapes save that passing to the waste steam drier; and if properly proportioned, all the steam will be condensed and no heat wasted.

From the waste steam drier, the water of condensation and the air pass freely into the return line, thereby producing a continuous circulation of steam through the waste steam drier. This steam, having been drawn from the return header, causes a like circulation through the main driers, and consequently the whole equipment is subjected to a thorough circulation. The first object in view, that is, the removal of air, is thus secured and this enables the same amount of drying to be done at a lower pressure.

Second Object in View

The withdrawal of steam from the main return header reduces the pressure within it, thereby establishing a material difference of pressure between the return header and the interior of the driers,—which is the second object in view. With this difference of pressure there is a more complete and uniform discharge of water from the driers, especially in the case of driers having siphon drainage, than would otherwise occur. Under the usual conditions of operation, with the return header trapped, there is practically an equilibrium of pressure between the header and the interior of the driers. Until this equilibrium is disturbed the tendency is for the water to be held back within the driers. In a 48-inch drier fitted with siphons the difference in head required to force the water through the siphons is about 22 inches of water or about ¾ lb. per sq. inch. Careful tests under those conditions often show less than ¼ lb. difference, which is not sufficient to secure good drainage. The use of the circulation system under consideration secures a difference in pressure of at least 1 lb. per sq. in. This introduces conditions which overcome the difficulty noted and result not only in complete drainage but also in substantial regularity of discharge. In the case of siphon driers the improved result secured in the matter of regular discharge is very marked. If the driers are equipped with buckets or dippers a difference of pressure is needed to overcome the centrifugal force of the condensate which is whirled around on the inside of the revolving drier. In machines of this class the system is especially useful because it permits of much higher rotative speed.

An Important Provision

The restriction feature is an important provision. When the individual return pipes are too large, short-circuiting is liable to occur to such an extent as to make one drier or group of driers hold back the water in the driers. Restricting the outlets in such cases furnishes a simple means of overcoming this difficulty.

Applications in U. S. and Canada

The Barrus system has been applied to many paper machines in New England, the middle states and Canada.

Technical Section, Page 41

Elimination of White Water Waste With the American Continuous Filter*

By John H. Hoyt, United Filters Corporation

Until comparatively recent years, the loss of large quantities of fiber in mill effluent or white water was regarded as a sort of necessary evil by a very large number, if not the majority, of paper manufacturers. This was particularly true of the paper machine operators, who considered it essential to the making of a good sheet that a certain portion of the extremely short fiber and wood flour should be discarded along with the white water. An additional reason, or at least excuse, for this practice was, of course, to avoid the accumulation or building up of slimes in the mill system.

However, as a natural result of the impending scarcity and increasing cost of raw materials, together with the sharp rise in manufacturing cost that occurred during the war, the attention of paper mill executives and operators was inevitably and forcibly drawn to the enormous waste that this condition actually represents.

A full realization of just what these losses amount to in dollars per year was largely made possible by the careful investigation of the technical and research departments, which are today an essential part of the organization of most of the leading and more progressive water companies.

Credit Due Technical Section

A great deal of credit is also due the Technical Section of the Canadian Pulp and Paper Asssociation, as well as the Committee on Waste of TAPPI, for the information they have collected on this important subject, and particularly for the widespread and active interest which their findings have helped arouse.

At the meeting of TAPPI which was held in Detroit, Michigan, during the fall of 1922, a subcommittee was appointed to make a detailed study of waste in mill effluents. With a view to making a fairly comprehensive survey of total losses from this source, the subcommittee prepared a standard questionnaire, which included the following essential points:

1—Kind and quantity of paper produced;
2—Amount of white water sent to sewer;
3—Number and type of save-alls used, if any;
4—Pounds fiber lost per day.

These apparently simple questions were widely distributed amongst American mills, and the returns were so interesting and significant that we take the liberty of quoting the following introductory remarks from the subcommittee's first report:

"Approximately 400 questionnaires were sent to a great many mills, to which 64 replies were received. With a very few exceptions, however, the information obtained in these questionnaires was very inadequate, and little tangible data can be obtained from them. The only definite piece of information brought out, and that very forcibly, was that most paper mills are in a happy state of ignorance as to the amount of fiber or other losses throughout their mill effluents."

Decided Change in Attitude

While this report reflects a condition which was probably more or less general at that time, in American mills at least, there is much evidence pointing to the fact that there has since occurred a decided change in attitude on this subject. A considerable number of mills have accurately determined the nature, course, and size of their losses, and many of them are now taking effective steps to abolish this unnecessary waste. Much of the work appears to have been modelled after the excellent systems of sampling and technical control in use by certain of the leading Canadian newsprint mills.

In order to get a rough idea of the present total loss in dollars, Mr. Hovey has prepared an estimate based on the Canadian production figures for 1924. Using the best data available, he has conservatively estimated the percentage losses on each grade of paper and pulp, and has evaluated the resulting totals at prices that represent only a very nominal value for the stock list.

	Production Tons	Waste Per cent	Waste Tons	Value Ton	Waste Value
News print	1,353,000	5	67,650	$20	$1,353,000
Book and writing..	70,000	4	2,800	20	84,000
Wrapping	90,000	3	2,700	20	54,000
Boards	135,000	5	6,750	15	101,250
Mechanical pulp....	265,000	4	10,600	10	106,000
Sulphite pulp.....	360,000	2	7,000	30	216,000
Sulphate pulp.....	128,000	2	2,560	20	51,200
	2,401,000		100,260		$1,965,450

The groundwood, sulphite, and sulphate pulp production figures are exclusive of the pulp used in making the quantities of paper indicated. Since a good many paper mills purchase or use lapped pulp, on which a white water loss has already occurred that is not reflected in the foregoing estimate, it would appear that the calculated lossses are well on the conservative side.

Higher Loss Than for Canada

Applying the same method of estimating to the American production for 1923, gives a very much higher loss than for Canada. This is chiefly due to the larger proportion of book, writing, and other papers, containing largely chemical pulp, which are produced in the States.

	Production Tons	Waste Per cent	Waste Tons	Value Ton	Waste Value
News print (1924)..	1,470,581	5	73,500	$20	$1,470,000
Book and writing..	1,598,431	4	63,900	30	1,917,000
Wrapping	1,026,979	3	30,800	20	616,000
Boards	792,832	5	39,700	15	595,500
Mechanical pulp....	1,580,553	4	63,200	10	632,000
Sulphite pulp.....	1,448,787	2	29,000	30	870,000
Sulphate pulp.....	243,681	2	4,860	20	97,200
Soda pulp.....	445,162	2	8,900	20	178,000
	8,607,006		313,860		$6,375,700

While the combined losses for Canada and the United States, as above calculated, amount to $8,341,150, it seems probable that if the true figures for all mills were available, the total might easily reach ten million dollars per year, and possibly a great deal more.

The foregoing estimates are in no way intended as authentic statistics on this subject, but merely as an effort roughly to approximate the total value of fiber being lost to sewer in white water. From the somewhat limited information available on this subject, however, it appears reasonably certain these estimates do not exaggerate present conditions, and that the reverse is more apt to be the case, particularly if we include the large quantity of clay filler, sizing, color, etc., that are also wasted in the effluents from many mills.

Methods and Types of Equipment

In order fully to appreciate the comparative value of the waste elimination methods to be later described, let us first consider very briefly the methods and types of equipment which have heretofore been in general use for the recovery of stock from white water. The principal ones may be broadly grouped into three general classifications:

Rotating screen save-alls;
Inclined screens;
Sedimentation.

* Read at the Annual Meeting of the Technical Section of the Canadian Pulp & Paper Association, Montreal, Jan. 27-29, 1926.

Rotating screen save-alls are usually operated at speeds of seven to ten revolutions per minute, and the water is caused to flow through the covering wire, either by a very low hydraulic head or by a slight vacuum maintained within the drum. In certain types, a combination of both is employed.

The thin sheet or layer of pulp deposited on the surface of the drum is removed every revolution, thus exposing the bare wire seven to ten times a minute.

Under these conditions the fourdrinier wire functions primarily as a sieve or screen, at least during a considerable portion of each revolution, and until a pulp film of appreciable thickness has been formed. This being the case, it is apparent, as well as a matter of experience, that the amount of fiber recovered is very largely determined by the mesh or size of openings in the wire employed.

For various practical reasons, it is seldom customary to use anything finer than 60 to 90 mesh wire, and even the latter will permit a considerable percentage of the fiber to pass through it along with the white water. Also, in the lase of open ended drums equipped with deckle straps or collars, an additional amount of stock also invariably escapes around the ends of the drum into the effluent.

On account of these features, which are inherent in the revolving screen type of save-alls, it leaves a very great deal to be desired from the standpoint of recovery efficiency. Because of differences in individual design and operating results, it is difficult to give specific recovery figures that are not apt to be contradictory to the experience of certain mills. While the plants in which we have so far collected data on this subject represent a comparatively small portion of the total number using save-alls, we believe the results are sufficiently typical to warrant their being mentioned.

Figures from Representative Mills

An analysis of the figures kindly furnished us by a number of representative mills indicates that under the best conditions, a revolving screen save-all may recover from 65 to 75 per cent of the fiber in white water, but that, in most cases, their efficiency is much lower, sometimes down to 30 per cent or even less. Somewhere around 50 per cent would probably be a fair average.

The recovery efficiency of an inclined screen is still lower; and except when handling white water containing sulphite or other ong chemical fiber, the percentage retained on the wire in many nstances scarcely warrants its use at all. It is not unusual for 75 to 85 per cent of the total solids in groundwood white water o be lost through an inclined screen; and even when used on long fiber effluent, the recovery seldom exceeds 40 per cent.

Nearly all of the preceding remarks concerning revolving screen save-alls apply equally well to deckers or cylinder moulds ordinarily employed for thickening stock. On account of the much higher density of the feed, the percentage of total stock retained on the decker drum is naturally greater than in the case of a save-all handling white water; but the effluent generally has a high consistency. For example, the effluent from an ordinary groundwood decker receiving thin stock at 0.4 to 0.5 percent density, generally averages around 6 pounds fiber per 1,000 gallons. This means that for every 100 bone-dry tons of stock delivered to the deckers, from 12 to 15 tons pass directly into the white water system, and a considerable portion of this is usually lost.

While the effluent from a sulphite decker handling stock at from 0.2 to 0.3 percent density has a much lower consistency, it ordinarily ranges from ¾ to 1 pound per 1,000 gallons. This is equivalent to a loss of from 3 to 5 tons into the white water system for every 100 tons thickened.

The deckering or thickening operation as now generally practised, represents one of the largest, if not the single largest, source of white water produced in the average paper mill. It is apparent that if a perfectly clean separation of pulp can be made at this point, and practically clear water discharged instead of the usual white water, it would represent a long step toward reducing and simplifying the entire problem of waste from this source. As we will explain in more detail later, this is now being actually accomplished.

Having briefly outlined the heavy penalty imposed on the pulp and paper industry through waste in mill effluent, and the comparative inadequacy of revolving drum and inclined screen save-alls toward overcoming it, we are now ready to take up the real subject of this paper—Elimination of white water waste with the American Continuous filter.

Installation at Abitibi Plant

Several years ago the management of the Abitibi Power and Paper Company, Ltd., became impressed with the idea that the deckering or thickening of stock, as well as recovery of fiber from white water, were both essentially filtration problems that could best be handled by equipment designed for this specific purpose. Following a preliminary joint investigation by their research department and engineers of the United Filters Corporation, a small size American continuous filter was installed in their

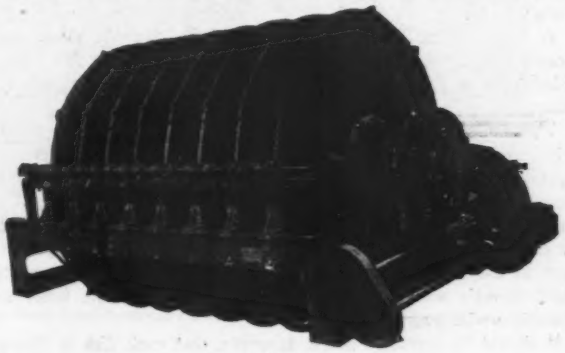

FIG. 1

Nine ft. diameter—8 disc American Continuous Filter. (Paper Pulp Type—700 square ft. area.)

Iroquois Falls mill, and a rather elaborate series of tests was begun to determine its efficiency as a groundwood decker.

Although in very general use by the metallurgical, chemical, food products, and many other industries, this was the first time that the American, or any other continuous vacuum filter (so far as we are aware), had ever been used for this particular purpose. Quite naturally, certain unforeseen difficulties and problems had to be met and overcome. Also, a number of important modifications in design proved necessary properly to adapt the filter to this new and unusual service. After these preliminaries were satisfactorily straightened out, however, the filter was kept in more or less continuous operation over a period of six months or so, and the results proved most gratifying.

The white water from their ordinary groundwood deckers usually carrries around 6.7 pounds fiber per 1,000 gallons, and at times even more. The corresponding effluent from the American filter when operating at maximum speed and capacity, was found to average 1.25 pounds per 1,000 gallons (0.015 percent), or only a small fraction of the quantity carried in decker white water. By reducing filter speed and capacity somewhat, it proved possible to discharge effluent carrying as low as 0.8 pounds per 1,000 gallons.

Moreover, a careful examination of the two effluents revealed the interesting fact that the decker white water included a considerable percentage of the long and most valuable fiber, whereas that from the filter carried practically nothing but wood flour and slime, with a very few extremely short fibers. In view of the nature and extremely small quantity of the latter, it was apparent that in commercial operation the effluent from a filter could, if desired, be sent direct to sewer without any loss of stock worth mentioning, and at the same time render unnecessary

the use of save-alls. In short, the functions of both a decker and save-all would be combined in a single machine.

Experimental Work Satisfactory

As a result of this experimental work arrangements were later made by the Abitibi Power and Paper Company for the installation of a full sized filter, to serve both as a decker and save-all in their groundwood decker room. At this point, we will endeavor to explain with a few slides the construction and operating principles of the special pulp type American continuous filter, which was developed by the United Filters Corporation very largely on the basis of experimental data obtained in the Abitibi mill.

The unit shown is the largest size pulp type American filter so far constructed, and consists essentially of eight filter disks 9 feet diameter and covered with fourdrinier wire or other suitable filter medium.

These disks are assembled around a hollow cast-iron center shaft, which is mounted on a supporting frame and directly connected to a drive motor through a worm gear and speed reducer.

A heavy sheet steel tank is supported from the same main frame that carries the center shaft and disks. When this tank is filled with stock or white water, the disks are submerged to a point well above their horizontal center line.

The hollow center shaft terminates in a rotary plug valve, which is so constructed that at all times its discharge port or opening connects only with the submerged portion of the filter disks. A fairly high degree of vacuum is constantly maintained on the discharge opening of the filter valve by means of either a wet or dry vacuum pump or barometric leg. Since the corresponding port in the filter valve connects through conduits in the center shaft directly with the filter disks, the interior of the latter are likewise under vacuum.

It should be carefully noted, however, that each disk is formed of ten separate and independent V-shaped sectors, and the design of the valve is such that vacuum is applied only to the completely submerged sectors of each disk.

With the tank kept full of feed, and the center shaft and disks rotating at a very low speed, usually one to two revolutions per minute, a large quantity of water is constantly sucked through the filter disks, along the center shaft conduits, and discharged through the outlet on the filter valve. At the same time, a sheet or layer of fiber is deposited on the submerged portions of the disks. Depending on the nature and density of feed being handled, this sheet of pulp acquires a thickness of from 3/16 to 1/2 inch before the disks emerge; but it adheres firmly to the wire surface until reaching a roller doctor, located just above the point at which the disks submerge. The doctor effects a perfectly clean removal of thick stock, thus exposing the bare wire for the next revolution.

Vital Differences

While at first glance the operating principle of the American filter may appear somewhat similar to that of an ordinary save-all or decker, there are three vital differences which account for the far greater clarity of the effluent from the filter. These differences are: Slow speed of rotation; high vacuum maintained; and the mechanical construction of the filter disks. In this connection, it should be remembered that vacuum is merely a term expressing difference in pressure, and that rate of filtration is roughly proportional to the pressure that produces it.

A pulp type American filter ordinarily operates under a vacuum of from 15 to 25 inches of mercury: but to secure an equivalent filtration pressure and capacity with an ordinary save-all, depending entirely on submergence of the cylinder or drum, would require a head of water from 17 feet to 28 feet above the drum. This, of course, would be entirely impractical, as the hydraulic head must always be less than the diameter of the cylinder, although in certain types this is supplemented with a very low vacuum carried within the drum. As a consequence, the effective filtration pressure on the filter is many times that of an ordinary save-all or decker. It is because of this relative high filtration pressure that the filter can be rotated at a speed of only one to two revolutions per minute, compared with seven to ten for a save-all, and still maintain a surprisingly high rate of flow through the resulting thick sheet of stock.

Consider for a moment the operation of a single sector in the filter disks. Just as it completely submerges, the full vacuum is automatically applied through the rotating filter valve, and filtration begins. Almost instantly, a layer of fiber is deposited over the entire surface; this forms an ideal filter medium of steadily increasing thickness and efficiency. In other words, after the

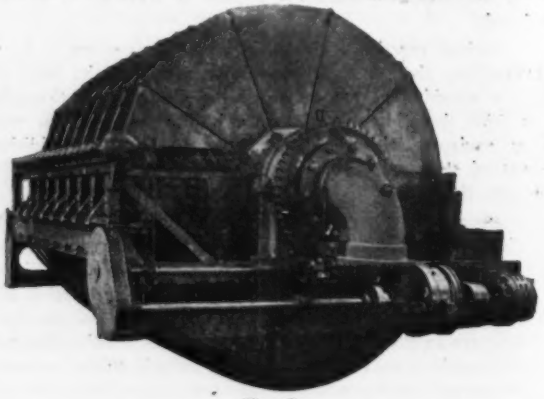

FIG. 2

Nine ft. diameter—8 disc American Continuous Filter. End view showing filtrate outlet and direct motor drive arrangement.

first moment of submergence, it is the sheet or mat of pulp that serves as the real filtering medium, and not the wire itself.

The construction of a sector is such that it is impossible for any water or stock to short circuit or escape through the filter without first passing the pulp mat covering the wire. This entirely eliminates the stock loss that so often occurs past the deckle straps and around the ends of a save-all drum.

The Abitibi Installation

The Abitibi installation consists of a 9-ft. diameter, 8-disk, pulp-type, American continuous filter, vacuum receiver tank, 32-ft. barometric leg, and dry vacuum pump. The leg terminates in a seal box at its lower, equipped with weir and automatic device for accurately measuring and recording the flow. With the vacuum pump running, a 25-inch vacuum is maintained, and under these conditions, the filter has a capacity of from 2,200 to 2,400 gallons per minute of thin groundwood stock delivered at densities of approximately 4.5 to 4.8 percent. This is equivalent to from 60 to 65 tons bone-dry tons of stock per 24 hours; and four or five of their ordinary groundwood deckers would be required to handle the same quantity.

The filter operates equally well with the vacuum pump shut down entirely; but under this condition, the vacuum drops to 18 or 20 inches, and the capacity is reduced about 15 to 20 percent, or to 50 to 55 tons of stock per day. In this case, of course, the barometric leg serves to produce the vacuum and withdraw the filtered effluent, which is discharged direct to sewer.

The drive motor on the filter itself takes approximately 10 hp., and an additional 10 hp. is required for the dry vacuum pump. With the latter shut down and the filter operating on barometric leg alone, the total power required for the installation is therefore only 10 hp., which is extremely low when its capacity is considered. The thick stock is discharged at a density of 8 percent, and before being sent to the stock chest, it is diluted with thin stock to 3 percent in a cut and folded flight conveyor, located immediately below the filter tank.

In addition to thickening the quantities of stock indicated, the installation has reduced the amount of fiber formerly sent to sewer in the same quantity of white water by approximately five tons per day. This saving alone would well justify the installation, entirely aside from its large thickening capacity.

The American filter is even more efficient as a thickener for sulphite stock, and has a capacity of 4,000 to 5,000 gallons per minute at the usual densities of 0.20 to 0.35 percent. In terms of bone-dry stock, this amounts to 60 to 85 tons per 24 hours. The thick sulphite stock is discharged at from 5 to 6 percent density, while the consistency of the effluent is surprisingly low; usually around 0.10 pound (.0012 percent) to 0.20 pound (.0024 percent) per 1,000 gallons; in some cases, it is as low as 0.05 pound (.0006 percent) per 1,000 gallons.

Powell River to Make Installation

As a result of preliminary tests with an experimental unit, the Powell River Company, Ltd., are preparing to install an American filter for deckering approximately 65 tons of sulphite stock in the enlargement to their mill at Powell River, B. C., which is now under construction. From the figures just mentioned, it is apparent that their fiber loss in sulphite white water will be practically reduced to zero.

Still another very interesting application of the American filter is its use as a save-all for recovering stock from paper machine white water; on this class of service it shows a remarkably high efficiency. The amount of fiber contained in machine white water is usually too small for the formation of a satisfactory sheet on the filter disks, as previously described; this deficiency is made up by the addition of a small percentage of machine furnish, which is usually available at a density around 3 percent. Upon filtration of this mixture, all of the stock added, as well as from 90 to 98 percent of that originally in the white water, is immediately recovered in suitable condition for returning directly to the machine chest.

This method lends itself particularly well to the requirements

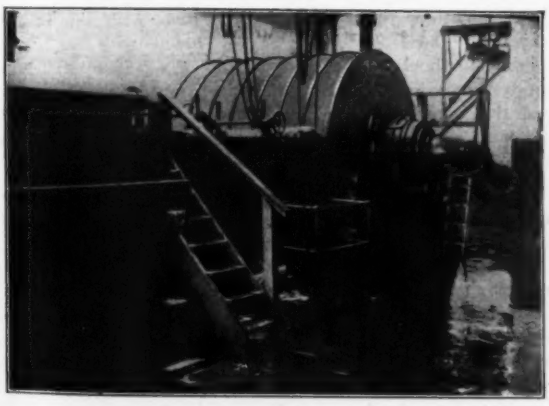

FIG. 3

Paper Pulp Type American Continuous Filter thickening groundwood slush at Abitibi Power & Paper Co., Ltd., Iroquois Falls, Ont., Canada.

of a mill making different colored papers. There is a very small quantity of material in the entire save-all system, and it can be quickly cleaned up and made ready for another color. Also, having an individual filter for each paper machine entirely solves the formerly difficult recovery problem presented by several machines in the same mill running on different colored papers at the same time.

The filtered white water is practically clear, and it can be re-used on machine showers or elsewhere without the least danger of plugging difficulties. Particularly in the case of mills where water is scarce, the reduction in fresh water addition is a valuable feature.

On the other hand, when water is plentiful, the extremely low consistency of the filtered effluent permits washing out the system with a large quantity of fresh water, but without the heavy stock loss caused by this practice.

An Additional Advantage

In many instances, the re-use of filtered white water for machine showers has the further advantage of conserving and returning to the machine most of the filler, sizing, color, etc., which would otherwise be wasted to sewer. Since there is often a difference

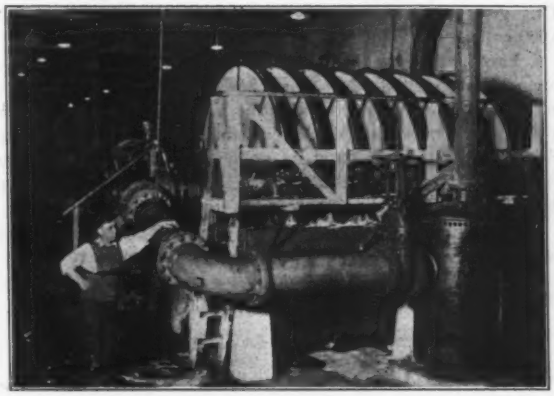

FIG. 4

Paper Pulp Type American Continuous Filter operating as groundwood decker.

of 16 to 30 degrees in the temperature between incoming fresh water and that in the mill, the re-use of the latter also means a substantial heat saving.

By using the American filter as a save-all, it is possible to recover from 90 to 95 percent of the fiber in news machine white water, and from 95 to 98 percent in the case of machines making tissue or other chemical fiber paper. Both of the large news machines being installed in the Powell River Company's new mill will be equipped with American filter save-alls, each having capacity of 2,200 gallons per minute.

Within the very near future two American filters will be put into operation in a large mill in the States as combined save-alls and bleach washers. The machine white water carries considerable amounts of clay filler as well as fiber, and to this will be added and mixed all of the bleached sulphite stock prior to filtration. The latter gives an excellent felting action on the filter disks, and preliminary tests showed that in addition to delivering filtered effluent containing only 0.05 pound per 100 gallons, a perfect wash is obtained on the bleached stock.

Chief Advantages

The chief advantage of the American filter, as compared with the various types of deckers and save-alls now in general use, may be briefly summarized as follows:

1. A relatively small amount of floor space is required. For instance, an 8-disk filter having a capacity of from 2,000 to 5,000 gallons per minute on groundwood and sulphite, respectively, occupies less than 12 x 20 feet. In the case of a new mill to be completely equipped with filters, this allows a material saving in the cost of the building.

2. The power required for an American filter installation compares very favorably with that for ordinary deckers and save-alls; and when a barometric leg of reasonable length can be used it is decidedly lower.

3. The construction of the filter dick permits changing a worn wire with scarcely any interference with filter operation. A few extra sectors covered with fresh wire are kept on hand, and one of these can be substituted for a worn sector in the filter disk in a few minutes' time. The latter can then be recovered at leisure, independently of the filter. This feature has the added advantage of economizing on wire, since only the piece that actually contains a hole or worn spo' is discarded, and the covering on one side of a sector represents less than 1 percent of the total wire area on the filter.

4. The thickened stock is discharged at a very uniform density, which simplifies the subsequent problems of consistency regulation.

5. The filter is very flexible as to capacity, since it can be furnished with any desired number of disks, from one to ten. This gives a choice of sizes ranging in capacities from 250 to 6,000 gallons per minute.

6. Largely because of its slow speed of rotation and heavy, rugged construction, the American filter has shown very low maintenance and repair costs in the many other industries where it is widely used. The duty is particularly severe in metallurgical plants, where it must stand up under continuous 24-hour service practically every day in the year, but, even on this class of service, the repair costs are very nominal.

While there has not yet been sufficient time to secure reliable figures on maintenance in paper mill service, it seems reasonable to expect that this item will prove to be in line with experience in other fields.

Application Depends on Local Conditions

The ways in which the American filter can be best and most profitably applied to the problem of white water waste in any particular mill, depend, of course, on the general arrangement, flow sheet, and other local conditions. When the source and magnitude of losses have been accurately determined, however, it then becomes simply a dollars and cents problem of working out the particular arrangement of filters that will show the largest return on the investment.

Any Paper Mill Can Reduce Loss

As a result of investigations and experiments extending over a period of more than two years, it is our firm belief that practically any paper mill, by using the filtration methods here described, can reduce their total losses in effluent to 1 percent or less on production, depending on the ability of the system to take the recovered fiber. When this condition has been realized in all, or even a majority, of the mills of Canada and the United States, it is evident that a very large amount of money that is now being allowed to run to waste will be directed into more profitable channels.

Paper Drying Sectional Meeting

In arranging the program of the annual meeting a place is being provided for continuing the discussion of the practical operation of the drier part of the paper machine, which was begun at the fall meeting in Kalamazoo in October.

Instead of discussing the different drying systems it is the intention of the Drying Committee to concentrate on the engineering phases of the problem. It is particularly requested that the members in attendance be prepared to discuss the principles involved in the distribution of steam in the drier part, and where there have been drying difficulties, to present statements of their experience.

Written discussion of the brief outline analyzing the paper drying operation, published in PAPER TRADE JOURNAL, January 7, by members who cannot attend, will be welcomed.

A short talk, illustrated by lantern slides, will be given by Ogden Minton on the 154 inch vacuum paper drier part which is under construction.

TECHNICAL SECTION, PAGE 46

To Survey New York's Forest Resources

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., February 3, 1926.—A survey of New York State's forest resources will be made by the Utilization Committee of the Empire State Forest Products Association as a preliminary step to participation in the national wood utilization program, in behalf of the consumer, to obtain complete use of all timber cut.

Axel H. Oxholm, director of the National Committee on Wood Utilization of the Department of Commerce, has received notice of this proposed cooperation in New York State, from A. B. Recknagel, forester and secretary of the Association, which will utilize available agencies in ascertaining what is left of the state's lumber resources and how timber users may utilize them to best advantage. Secretary Hoover is chairman of the National Committee on Wood Utilization, the purpose of which is to promote greater effectiveness in preventing wastes arising from present methods, so that the public at large as well as American industry may benefit.

Dudley F. Holtman, assistant director of the National Committee on Wood Utilization, who attended the conference, reported that the New York State committee advocated close cooperation with the national wood utilization program and also approved suggestions that a study be made of more economic operations in logging within the state. He said it was also agreed that the New York State committee should mobilize the existing agencies that can be of assistance in the problems of economy of utilization.

Vocational Education—Wisconsin

Harold C. Noyes, of Rumford, Me., pulp and paper instructor in the vocational school in charge of industrial training in the Oxford Paper Company plant at Rumford, has been engaged as instructor for a new course in pulp and paper for which arrangements were made recently by the board of the Appleton, Wis., vocational school. The incorporation of this course in pulp and paper instruction in the curriculum of the Appleton vocational school resulted from conferences between officials of the schools and paper manufacturers of the Fox River Valley. The course will be taught in Kaukauna, Neenah and Menasha, as well as in Appleton, through an incorporation with the vocational schools of those Fox River Valley towns with the Appleton vocational school. The school boards of all four cities will be jointly employing Mr. Noyes. It is planned in future to extend this vocational training service to all cities of the valley, and later to the paper manufacturing section of the Wisconsin River Valley.

Italian Papermakers Get Wage Increase

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., February 8, 1926.—An increase of 10 per cent on their present wage rates, and certain concessions in the matter of holidays, vacation, and overtime pay, was granted operatives in the paper mills in central and southern Italy, according to the terms of an agreement between the mill owners and their workers, says a report to the Paper Division of the Department of Commerce from the American Commercial Attache at Rome. This is the first increase granted the workers since January of last year.

Columbia River Paper Co. Elects Officers

[FROM OUR REGULAR CORRESPONDENT]

VANCOUVER, Wash., February 4, 1926.—At the annual meeting of the stockholders of the Columbia River Pulp and Paper Company held January 23, F. W. Leadbetter was re-elected president of the organization.

W. B. DuBois was elected vice-president; J. J. Donovan, secretary, and Hamilton F. Corbett, treasurer.

President Leadbetter gave his annual report in which he stated that no immediate expansion of the plant would be justified.

Current Paper Trade Literature

Abstracts of Articles and Notes of Papermaking Inventions Compiled by the Committee on Abstracts of Literature of the Technical Association of the Paper Making Industry

CLARENCE J. WEST, CHAIRMAN

Machinery

Pulp Screen. A. J. Haug assignor to Improved Paper Machinery Company. U. S. pat. 1,511,759, Oct. 14, 1924. A (preferably) octagonal screen drum rotates within a circular casing, and in close proximity to it. The stock to be screened is delivered to the interior of the screen drum at one end, and as the drum is rotated the stock is screened and the unscreened residue is lifted and dropped. The unscreened residue, having been first preferably thinned and diluted, is conducted by suitable feeding means which again deliver it to the drum, but at an advanced point in its length, so that substantially the same screening, lifting and dropping operation may be repeated. This is continued any desired number of times until the final unscreened residue is delivered to the tailings outlet of the machine.—A. P.-C.

Inward-Flow Pulp Screen. J. W. Hammond assignor to Bird Machine Co. U. S. pat. 1,518,507, Dec. 9, 1924. The screen is given the usual rotary vibratory motion. The bottom of the vat is provided with a well or funnel-shaped member adapted to receive the screenings which settle out in the lower portion of the vat. To facilitate entrance of the screenings into this opening, the outer surface of the screen is provided with a series of spirally arranged or inclined blades or flights, which are preferably provided with flexible wiping edges and are spaced at an angle to one another and to the axis of the screen. The funnel-shaped member is provided with a valve which is normally closed, but which is automatically opened by a cam once during each revolution of the screen, the opening of the valve being timed so that it occurs when the inclined blades have brought the screenings just over the funnel opening.—A. P.-C.

Flat Screen. R. Pawlikowski. U. S. pat. 1,521,469, Dec. 30, 1924. The patent covers various mechanical features of the construction of flat screens designed to overcome the drawback of present types of flat screens. It is claimed that the capacity can be increased by building larger units than was practically possible up to the present, the inclination of the screen can be altered while it is in operation, the screen is readily accessible for repairs, and the good stock is prevented from passing out with the screenings at the end of the screen.—A. P.-C.

Inward-Flow Rotary Screen. J. A. White assignor to Moore & White Company. U. S. pat. 1,505,835, Aug. 19, 1924. The vat is given a vertical and rocking motion by means of a cam acting on long wooden bearing beams under the vat. Wear of the cam is practically eliminated, and the bearing beams are readily replaced when worn. The screen is slowly rotated, and the material which passes through it is discharged into two troughs, one at each end of the screen, which are separated from the ends of the machine by spaces, so that lubricating oil or grease from the trunnion will not fall into the stock and discolor it. The screenings are discharged into an auxiliary screen box at the side of the machine, which has a diaphragm operated by the same cam at the vat of the main screen.—A. P.-C.

Screen Box. J. A. White assignor to Moore & White Company U. S. pat. 1,505,836, Aug. 19, 1924. The screenings from a pulp screen, which contain along with the coarse stock a certain proportion of fine stock which can be used as such without requiring to be refined, is delivered into a box provided with a curved screen plate. These plates are carried by vertical arms on each side of the screen, and the top ends of the arms are carried by a series of eccentrics which are arranged on two shafts parallel to the screen. The two shafts are made to rotate at the same speed and in the same direction, so that any given agitator plate travels in a circular path, instead of having a reciprocating motion as in the usual types of agitator. The eccentrics for each agitator may be set in relation to one another in such a way that the movement of the different agitators will be either asynchronous or synchronous.—A. P.-C.

Shredder. Matthews & Yates, Ltd. and W. Yates and R. Marx. Eng. pat. 228,726. The material, either wet or dry, is fed by a pair of rolls to a pair of cooperating spiked rolls rotating at different speeds, and is drawn therefrom into an air duct and blown to the beaters. Toothed or serrated guard plates are fixed beneath the rolls.—A. P.-C.

Refiner for Pulp, Sawdust, Etc. H. G. Cram assignor to Great Northern Paper Company U. S. pat. 1,526,461, Feb. 17, 1925. The machine consists essentially of two rotating rolls, one of which turns approximately 400 times the speed of the other. The material is fed between the rolls by means of a long vertical pipe, which is kept full of stock, so that the latter is under certain pressure when it comes in contact with the rolls. The fast moving roll is given a slight, axial, reciprocating motion. The wear of the rolls is compensated by automatically moving the slowly-turning roll towards the other. This is accomplished by means of reduction by worms and worm gears, so that the advancement is only a slight fraction of an inch daily.—A. P.-C.

Roll for Rotary Pressing Apparatus. R. E. Wagner assignor to A/B. Karlstads Mekaniska Verk. U. S. pat. 1,520,489, Dec. 23, 1924. The roll is provided with a jacket, made either in one piece or in sections, the outer surface of which is provided with peripheral slots or grooves, and the inner surface with longitudinal or axial grooves which communicate with grooves in the outer surface. The liquid pressed out of the pulp or paper passes into the narrow circumferential grooves, and from them into the inner longitudinal grooves, when they may be drawn out by means of a suitable suction device. A scraper is provided the blades of which project into the peripheral slots, so as to remove any adhering particles of pulp or water.—A. P.-C.

Paper Duster. O. Albert assignor to Galalnd-Henning Manufacturing Company U. S. pat. 1,512,516, Oct. 21, 1924. A bale of paper is fed into a rotating, perforated, sheet metal drum, provided with longitudinal lifting blades and with chains attached to a shaft passing through the drum. The combined action of the rotation of the drum, the lifting blades and the chains breaks up the bale, and the paper then passes into a screen drum which is preferably rotated at a different speed from that of the first drum and in which the paper is "dusted."—A. P.-C.

Apparatus for Treating Paper Stock. J. A. White assignor to Grellet Collins. U. S. pat. 1, 524,605, Jan. 27, 1925. A vertical cylindrical, somewhat tapering, concrete tank is provided with a vertical shaft in the center. The lower portion of the tank, which is somewhat larger than the top, is rounded so as not to interfere with the free flow of the paper stock. In the center of the tub, near the bottom, is a cylindrical midfeather, the interior diameter of which is even throughout. On the shaft is a worm, which is lower than the height of the midfeather and which is located in the lower portion of the latter; and some distance above the midfeather there is another worm on the shaft. The midfeather is some distance from the bottom of the tube so as

to provide a channel of sufficient size for the free flow of the material. The under side of the midfeather is flat, and the outer wall is tapered. Rotation of the shaft causes the stock to circulate downwards through the midfeather, and up along the sides of the tub.—A. P.-C.

Paper Pulp Shredder. W. F. Hussey assignor to Waterville Iron Works. U. S. pat. 1,510,782, Oct. 7, 1924. The sheet of pulp is fed progressively until the edge rests on or projects beyond the toothed edge of a fixed cutter, and a rotating cylinder, provided with projecting knives moving in the spaces between the fixed cutter cooperates with the latter to sever the material. The rotating knives are preferably arranged so that adjacent knives engage the material successively and but a relatively small number of them are actually in engagement with the material at any given moment. This arrangement of the knives results in a shearing action which greatly reduces the power required to operate the machine, and increases the surface of penetration of the water when the material is subsequently put in the beater. This can be still further increased by leaving a certain clearance between the teeth of the fixed and rotary cutters, which will tend to tear rather than shear the material. The knives on the cylinder are preferably arranged symmetrically with respect to the center of the length of the cylinder, so as to balance the pressure on the bearings and avoid any tendency to shift the material laterally. The fixed cutter is adjustable for wear and the rotating knives are adjustable and readily replaceable, the cylinder being built of a series of knife-carrying disks securely bolted together on a common shaft.—A. P.-C.

Watermarking Attachment for Paper Machines. A. Ek. assignor to Brown Company. U. S. pat. 1,522,579, Jan. 13, 1925. A shaft, preferably slightly above and back of the upper roll of one of the wet presses, carries a sleeve with a weight arm on one side and a lug on the other. A rod is held in a vertical opening in the lug, and the lower end of the rod is forked to form arms between which is mounted a narrow roll, the surface of which carries raised letters or designs. The weight at the end of the weighted arm presses the roll against the moist web, and the raised letters or designs compress or displace portions of the fibers of the web to form watermarks. A series of these narrow watermarking rolls is provided at convenient intervals, all supported on a common shaft extending across the width of the machine. The device can be attached to existing paper machines. —A. P.-C.

Watermarking Dandy Roll. G. W. Verow assignor to Eastern Manufacturing Company. U. S. pat. 1,520,099, Dec. 23, 1924. The portion of the roll on which the watermark lies is of coarser mesh than the remainder of the roll. This allows relatively free passage of air and water through the roll adjacent the marking element as the latter approaches and recedes from the pulp, and thereby eliminates the splash and suction effects produced in ordinary types of watermarking dandies when running at high speeds.—A. P.-C.

Sectional Paper Machine Drive. G. S. Witham, Jr., U. S. pat. 1,503,679, Aug. 5, 1924. A steam turbine of requisite power is provided for driving each section of the paper machine, all the turbines drawing their steam from a common header and exhausting into a header which feeds the paper machine driers. Each turbine is provided with a separate governor so that it can be maintained at a desired speed different from that of the other turbines, minor variations in speed of the paper machine section being obtained by shifting belts on cone pulley. The belts are put under tension by some suitable device, such as the "Lenix" tightener.—A. P.-C.

Stone Roll for Paper Machines. P. W. Bidwell assignor to B. F. Perkins & Son, Inc. U. S. pat. 1,504,179, Aug. 5, 1924. The metal trunnions have a square portion extending inwardly from the face of the flange which is in contact with the end of the stone roll; and each end of the roll has a corresponding recess of slightly greater dimensions. A circular opening extends through the whole length of the roll and of the two trunnions to receive a shaft or axle, the opposite ends of which are threaded to receive nuts which serve to clamp the trunnion flanges tightly against the roll. When the parts have been assembled, the flanges are drilled diagonally and grout or cement is poured into the space between the trunnion extensions and the roll body, packing being provided to prevent the cement from filling the space between the shaft and the roll body. The shaft and roll body can thus expand and contract freely under changing temperature conditions.—A. P.-C.

Watermarking Roll. C. R. Seaborne assignor to American Lakes Paper Company. U. S. pat. 1,517,018, Nov. 25, 1924. The roll is preferably adjacent to and presses against the first drying roll, and is built up of metal core covered with a layer of hard rubber (plastometer reading of approximately 0/100) about 0.25 in. thick, over and vulcanized to which is a layer of rubber (plastometer reading over 80/100) about 3/16 in. thick; and over the layer of soft rubber and vulcanized thereto is a second layer of hard rubber (plastometer reading 5/100 to 15/100 mm.) about 5/16 in. thick. The watermarking design is formed on the outer hard rubber layer. The roll may or may not be covered with a suitable fabric such as muslin, etc. The advantages claimed are: lower cost than for the ordinary metal marking cylinder, more satisfactory impression on the paper, requires wrapping only about once a week (instead of every 3 or 4 hr. as at present) resulting in lower wrapping costs and less loss in production. —A. P.-C.

Paper Carrier for Paper Machines. Wm. Sheahan. U. S. pat. 1,507,727, Aug. 12, 1924. Ropes or carriers are made to travel in contact with each other, and extend to and between the rolls over and between which the lead end of the web of paper is to be guided. At the receiving end of the first press these carries are spaced apart so as to facilitate the insertion between them of the lead end of the web, and a little farther on the carrier ropes are brought into contact with each other, so as to grasp and hold the lead end and in that way carry and guide it through the press rolls to the driers. When the lead end of the paper has reached the first drier, the carrier ropes separate to release the paper, which is then carried through the driers by means of the carrier covered by U. S. pat. re-issue No. 13,925 of June 8, 1915. When the paper has been delivered to the driers, the clutch of the driving sheave of the first paper carrier is thrown out. —A. P.-C.

Device for Removing and Replacing Paper Machine Suction Boxes. F. S. McDonnell assignor to Rice, Barton & Fales, Inc. U. S. pat. 1,520,659, Dec. 23, 1924. The invention provides for means adapted to support the suction box in its elevated position while the nuts and bolts which secure it to the stationary rails are being loosened and removed, and to then lower the box on to its tracks for removal from the machine by drawing it out endwise. The means are also adapted to lift the box from the tracks into its operative position against the stationary rails while the bolts and nuts are being put back into position. As the bolts and nuts in this instance are not called upon to perform the office of lowering the suction box on to its tracks, or raising it from its tracks, the unscrewing and screwing of the nuts may be accomplished much more rapidly and easily than hitherto. —A. P.-C.

Slotting and Scoring Device for Box Board in the Monture of Corrugated Boxes. N. L. Hurd assignor to S. M. Langston Company. U. S. pats. 1,525,238 and 1,525,239, Feb. 3, 1925. No. 1,525,238. In combined slotting and scoring heads one head of each pair is provided with a pair of slotting blades spaced apart a distance equal to the length of the box for which the blank is to be formed, and mounted between these blades is a scoring member. The blades are usually made adjustable toward and from each other circumferentially of the head, to facilitate the forming of blanks for boxes of different lengths, and this

necessitates the provision of a different length of scoring member for each box length. According to the present invention a flexible or articulated scoring member is used that will serve for all lengths and that may have its effective length varied to adapt it to any desired spacing of the slotting blades. The head is so designed that a portion of the scoring member may be stored or mounted in inoperative position within the head and may be drawn out into operative position as required. *No. 1,525,239.* This patent covers more particularly the scoring members, which are built up of short scoring blocks or units, connected in the form of an endless, articulated, flexible band, which is shiftable endwise so as to bring any desired length thereof into or out of effective scoring position. For producing staggered or offset scoring, one section of each scoring member is laterally offset in respect to another section, and the dividing line or point between these two sections may be moved along the periphery of the head in either direction. The individual blocks or units are preferably asymmetric and reversible so as to score on either side of a center line. A single set of blocks may thus be used for scoring a staggered line on the blank. —A. P.-C.

Cutting of Board at the Mill. P. K. Barnhart. Paper Mill 49, No. 30, 14 (July 25, 1925). Brief discussion of the requirements for a board-cutting knife with a description of the cutters of the Seybold Machine Co., and their merits.—A. P.-C.

Notes on the Manufacture of Newsprint at High Speeds. A. Jandeau. Papeterie 47, 510, 513 (June 10, 1925). A brief discussion of the principal troubles encountered, more particularly from the standpoint of overcoming static electricity and "dust" in the press room.—A.P.-C.

Static Electricity in Paper. E. Belani. Zellstoff U. Papier 5, 262 (July 1925). The static electricity in a sheet of paper is not caused by friction altogether, as commonly supposed, but by the removal of the water on the machine driers. The explanation of this is afforded by the so-called waterfall electricity of Lenard. The effect of the sudden heat from the drier is to disperse the water particles in the sheet which brings about an electrostatic condition before the actual evaporation occurs. —J. L. P.

Papermaking Machine. M. F. Herb. U. S. pat. 1,544,904, July 7, 1925. The breast roll end of the table is practically horizontal, the couch roll end is sloping, and the intermediate portion is approximately of parabolic shape.—A. P.-C.

Couch Roll. E. S. Anderson. U. S. pat. 1,543,540, June 23, 1925. A core with a central bore through which passes a shaft, has spirally disposed ribs on its periphery. The ribs have head portions which are conveyed transversely, and disks are threaded upon the core and the ribs, collars being applied to the ends of the core and the ribs. The ends of the shaft are received in gudgeons, which have disks to receive the ends of the core and the ends of the ribs. The gudgeons are engaged by nuts screwed on the shaft.—A. P.-C.

Table Roll for Paper Machines. E. N. Daulton. U. S. pat. 1,543,281, June 23, 1925. The roll comprises a pair of heads with suitable journals, a relatively heavy cylinder permanently secured to the heads, and a relatively thin metal tube mounted on the cylinder and having its end portions forced inward over the ends of the cylinder heads, the tube thus forming the outer wearing surface of the roll.—A. P.-C.

Broke Remover for Paper Machines. T. E. Durham. U. S. pat. 1,541,928, June 16, 1925. A trough is provided back of the press roll doctor, and a helical conveyor is located in the trough, the pitch of the conveyor increasing towards the discharge end. —A. P.-C.

Press Roll for Paper Machines. C. H. Griffith. U. S. pat. 1,537,439, May 12, 1925. The roll is covered with a vulcanized rubber jacket provided with air cells in the outer surface to make it repellent.—A. P.-C.

Steam Drying System. F. C. Farnsworth. U. S. pat. 1,531,744, Mar. 31, 1925. The battery of driers is divided into a suitable number of sections. Each section is provided with supply and return headers. The supply header of one section is connected with a source of steam and the return header of the same section is connected to deliver its steam into the supply header of the next section of lower pressure, a receiver being provided to remove the air and condensed water before passing the steam on to the next section. A by-pass is also provided for supplying steam from the supply header of the first section to the supply header of the section of lower pressure; and the by-pass carries a device for automatically controlling the passage of steam therein so that a constant differential will be maintained between the pressure in the two supply headers.—A. P.-C.

Drier for Paper Machines. F. W. Aucutt assignor to Inland Empire Paper Co. U. S. pat. 1,537,792, May 12, 1925. The siphon for removing the condensate from the drier roll consists of a pipe extending through the journal and a flexible piece of tubing extending from the inner end of the pipe towards the inner surface of the drier roll.—A. P.-C.

Paper Machine Drier. W. H. Millspaugh assignor to the Paper & Textile Machinery Co. U. S. pat. 1,533,130, Apr. 14, 1925. The drier rolls are mounted in anti-friction bearings. Only one of the rolls is driven from a source of power, the others being driven by means of the felt or other means used for passing the sheet in contact with the rolls.—A. P.-C.

Paper Machine Driers. W. B. Fulton. U. S. pat. 1,538,105, May 19, 1925. The battery is divided into a primary group and a secondary group. Steam is supplied to the secondary group and passes from the secondary to the primary group, the connection between the two groups being provided with a receiver and with a special valve. The latter is so located that steam is supplied to all of the secondary driers before it reaches the valve, and it controls the pressure of the steam passing to all the primary driers, thus being adapted to maintain a difference in pressure between the two groups.—A. P.-C.

Drive for Paper Machine Driers. G. D. Kilberry. U. S. pat. 1,533,194, Apr. 14, 1925. A suitable number of the felt rolls intermediate of the drier rolls are driven by means of a rope drive, and the drier rolls are driven from these felt rolls by means of the felt.—A.P.-C.

Doctor for Calender Rolls. O. Quante assignor to Dill & Collins Co. U. S. pat. 1,540,223, June 2, 1925. The doctor consists essentially of a pad attached to the top of a plate the inner edge of which is parallel to the calender roll. Over the pad is a clamping plate for clamping the pad on the supporting plate. At the rear edge of the supporting plate is an angle iron, the vertical flange of which is connected to the clamping plate by means of a series of springs.—A. P.-C.

Recovery of Papermaking Materials from White Water. L. M. Booth. U. S. pat. 1,543,663, June 30, 1925. The white water is mixed with a coagulating chemical and fed into a sedimentation tank in which the solid particles settle to the bottom. The liquid in the tank is gently agitated by a slowly traveling agitator traveling near the bottom of the tank. The thickened pulp is discharged from the lower portion of the tank, and the surplus liquid is drawn off from a plurality of higher levels, as required.—A. P.-C.

Paper Cutting Machine. C. Seybold. U. S. pat. 1,529,554, Mar. 10, 1925. In a paper cutting machine having a reciprocating knife bar and knife and a clamp for holding the material while cutting, an adjustable bearing is provided for the knife intermediate of its ends to prevent the knife bar from springing or bending out of alignment.—A.P.-C.

Roofing Papers

Machine for Making Asphalt Roofing. H. A. Gumfer assignor to Guyton & Gumfer Manufacturing Company. U. S. pat. 1,520,014 Dec. 23, 1924. The asphalt-impregnated sheet is passed under a

hopper from which mineral surfacing is distributed across its full width. The sheet then passes around a roll which embeds the deposited granular material partially into the plastic asphalt; and the other side of the sheet, which is now uppermost, passes under a second hopper from which similar or different surfacing material is distributed in the same manner and is embedded by making the sheet pass around a second roll. Means are provided for collecting the excess of granular material separately, and returning them to their respective feed hoppers—A. P.-C.

Machine for Coating Sheet Roofing. W. Rogers assignor to the Barber Asphalt Company, U. S. pat. 1,525,829, Feb. 10, 1925. Scrapers are provided for removing the excess of asphalt from the spreader rolls, and they are arranged so as to feed this asphalt back on to the sheet, but near the edges, which are the places most likely to have insufficient material. It is claimed that this allows of obtaining a proper covering with a smaller feed of asphalt, less of it being rejected over the sides of the sheet and having to be reheated.—A. P.-C.

Prepared Roofing Shingles. C. E. Rahr and R. T. Pollock assignors to the Flintkote Company. U. S. pat. 1,517,860, Dec. 2, 1924. The impregnated roofing is put through embossing rolls, which form tapered embossments, the higher portions of which are at the lower edge of the shingle when laid and the upper end of the embossments forming low shoulders which furnish abutments for the lower edges of the shingles above. After passing the embossing rolls the sheet is first slit and then cut transversely so as to give shingles of the desired dimensions. This style of shingles imitates roofing tiles.—A. P.-C.

Method of Making Asphalt-Impregnated Paper. H. C. Avery assignor to Flintkote Company. U. S. pat. 1,515,821, Nov. 18, 1924. When a large amount of asphalt is incorporated into paper by the Kirschbraun process (U. S. pat. 1,302,810, of May 6, 1919) the felting of the fibers is quite satisfactory, but the asphalt renders the material so sticky that considerable trouble is experienced from the sticking of the sheet to the felts and drying rolls. According to the present invention this difficulty is overcome by using a multi-cylinder machine, the outer plies being formed of a furnish without asphalt emulsion, while the inner plies have the required amount of asphalt. The sheet is dried without trouble from sticking, and the outer unwaterproofed layers are removed by wetting and subjecting to the action of brushes, the coalescence of the asphalt when it is passed over the driers, preventing the inner plies from disintegrating by the scrubbing operation—A. P.-C.

Miscellaneous Products

Paper Bags. F. Wrigley. Eng. pat. 230,188. The mouth of the bag is stiffened and provided with registering hand holes in the stiffened portions to form carrying means. The bag is creased so as to collapse flat and the stiffening may extend around the whole of the mouth or may consist of two rectangular strips, the other two sides being formed of unstiffened material. The mouth when opened assumes a similar shape to the rectangular bottom of the bag.—A. P.-C.

Paper Bags. F. Wrigley. Eng. pat. 230,182. In a collapsible paper bag of the kind in which the walls are creased at the mouth so that the bag presents a rectangular or similar formation when opered, the walls are stiffened around the mouth by a strip, the side walls serving to retain the mouth opened. The creases are in groups of three, so that two opposing walls move toward each other when the bag is collapsed. One wall may be extended to form a flap, which is adapted to cover the mouth of the bag and creased to correspond with one or more of the creases of the bag. A carrying cord passes through holes in the side walls and flap, so that by pulling on the cord the flap is drawn over the closed mouth and is retained in position by the weight of the bag.—A. P.-C.

Paper Tape Product and Method of Making It. H. A. Twiss assignor to Nashua Gummed and Coated Paper Company. U. S. pat. 1,518,122, Dec. 2, 1924. The central portion of a flat coil of gummed paper tape is deflected out of the plane of the rim of the coil to an extent according to the depth desired for the final hollow article. The distorted coil is then subjected to sufficient moisture, as by steaming, to soften the adhesive carried by the tape, and then it is dried so as to retain its more or less cone shape. Afterwards it can be waterproofed, painted, or otherwise ornamented. If the article produced in this manner is for use which requires that there shall be no central opening at the bottom a plug of wood, or paper, or other suitable material is fitted into the hole which originally existed as the center of the flat coil, and which later exists at the bottom of the shaped article.—A. P.-C

Paper Tube Making Machine. J. W. Holt assignor to Union Paper Company. U. S. pat. 1,507,735, Sept. 9, 1924. The invention comprises a machine which automatically glues and winds the paper strips into a tube, rotates and advances the tube as formed, and cuts off the tube in finished sections with smooth ends ready for use as mailing tubes, or ready to receive tops and bottoms to make paper cans or cartons. The tube, as it is formed and advanced along a mandrel, is roughly cut by a revolving saw. which travels with the tube, into sections of approximately any desired length, which are then conveyed to disk knives which cut them down to the desired finished lengths.—A. P.-C.

Apparatus for Folding Waterproof Paper Blanks for Making Paper Umbrellas. L. B. Ross. U. S. pat. 1,517,862, Dec. 2, 1924. The blank is placed and suitably held in position on a fixed die which is substantially conical in form and has formed on its upper surface tapering ridges which converge upon a flat circular face formed at the top of the die. A series of creasing dies, operated by means of cams, are successively brought into engagement with the several ridges of the fixed die so as to seat on the latter and crease the paper. When all the movable dies have been seated in the blank, they are lifted up from the latter, which will then have been creasd in the desired manner. The creased blank is then folded and is passed through a pair of rolls if it is not sufficiently creased.—A. P.-C.

Degree of Delignification of Cellulose. Paper Trade J. 80, No. 26, 49 (June 25, 1925). Brief description of the Roschier permanganate test, with a comparison of the results which it gives with those of the Sieber chlorine number.—A. P.-C.

Summer Meeting of the Canadian Technical Section a Great Success. Pulp & Paper 23, 740-744, 758 (July 2); 765-767 (July 9, 1925). An account of the meeting, including the discussion of Stern's paper on the "Yield-Density Method for the Determination of Wood Consumption."—A. P.-C.

Report of the Hamburg Paper Convention. Anon. Wochbl. Papierfabr. 56, 777-782, 785,788 (June 27, 1925). Brief reports of the sessions of the Hamburg paper convention. An abstract of an address on waste water testing and stock recovery by Director Herdey is included.—J. L. P.

Twentieth Anniversary of the Chair of Paper Manufacture at the Technical University, Darmstadt. Anon. Wochbl. Papierfabr. 56, 811-814 (July 4, 1925). Appropriate remarks by various workers connected with the Technical University at Darmstadt are given.—J. L. P.

Questions on Paper and Pulp Manufacture. Anon. Zell. U. Papier 5, 208-210 (June, 1925). A series of question and answers, the latter by A. Klein, on paper and pulp manufacture.—J. L. P.

Abstracts of Pulp and Paper Literature. E. Graap. Zell. U. Papier 5, 225-230 (June); 268-271 (July, 1925). Brief abstracts of both chemical and mechanical articles in German magazines. The period covered is Jan.-Mar., 1925.—J. L. P.

Digester Blow Valve. J. D. Ehrmann, H. W. Cleveland and D. L. Bellinger, assignors to D. J. Murray Manufacturing Co. U. S. pat. 1,529,583, Mar. 10, 1925. A door is provided in the lower front portion of the valve body, and the door has a rib in the portion adjacent to the valve seat. The valve is provided with a lug which projects from the peripheral edge and engages with the rib on the door.—A. P.-C.

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Scope of Financial and Industrial Investigations*

By Arthur Anderson, Arthur Anderson & Co.

In the past few decades the conditions of industry have been greatly changed, principally through the perfection of labor-saving machinery which often can produce more units of a certain product in an hour than could formerly be produced in a week. This tremendous mechanical change has given rise to various industrial and economic changes. In the first place it has tended to decrease the number of men required by industry, and so has led to the development of new products, new industries and new uses for existent products. In the second place it has demanded a far wider distribution of all products, an increased market.

Fortunately mechanical advancement itself provided the means for greater distribution, giving improved instruments of transportation and communication. The steam and electric railroad, steamboat, automobile, truck, airplane, telephone, telegraph, radio, printing press, all have been developed or improved to aid in the nationalization and internationalization of industry. But as markets have broadened and as all mechanical devices have been continually bettered, these very factors have, in turn, placed a new pressure on industry, demanding greater and greater production facilities and larger and larger industrial units, thus creating a regenerative cycle of growth.

Larger industrial units have led to a multiplication and magnification of all of the problems of financing, purchasing, manufacturing and merchandising. Mass production is possible only if there is an assured and steady supply of raw material; it is possible only when all manufacturing departments work to controlled standards and in a coordination of time and quantity; it demands a balanced relationship between sales demand and production schedules; and it requires the closest attention to finance as related to the producing and selling programs.

Change in Ownership

In the matters of finance, industry is changing from sole proprietorships and partnerships to corporations and these corporations are continually demanding a more widely contributed capital. The increased capital requirements have led to more public financing, greater bank loans and continuous refinancing. This process leads in turn to the relationship of management with bankers, lawyers, appraisers, accountants, engineers, stock and bond brokers. It necessitates audits, statements, improved accounting, budgets, perpetual inventories. In the matters of sales and distribution the large industrial unit is involved in problems of freight rates, ocean freights, international exchange, international credit, foreign agencies, branch house control, sales budgets, national advertising, tariffs. On the production side there are problems of engineering research, design and development, patents, processes, materials, sources of supply and mechanical improvements.

All of this merely presents a picture of things as they are and gives some idea of the modern trend toward greater size and complexity of the industrial unit. Recently there have been some striking examples of the growth of particular businesses. This growth may be by reason of expansion from within—as was at first the case with the Ford Motor Company—or by the acquisition of supplemental businesses and industries to form one "vertically integrated" structure—as is the present policy of the Ford business. Or it may result from the combination of similar industries to form a "horizontal integration," as was the case with General Motors, International Harvester Company, and the Standard Oil Company. In any event the tendency is more and more to combinations and mergers and it is useless to attempt a forecast of what may eventually come about in the way of huge business structures. An ultra-modern effect is seen in the recent efforts of the Stinnes interests, which became international in their program of combination and acquirement.

This means that the problems of business also will increase and will attain a complexity and variety even greater than they have at present. It is possible to see that the purchasing functions of a great business may become those of divisional co-ordination rather than of merchandising. That is, one industrial structure may own and operate its coal and iron mines, its palm, cotton or olive plantations, its timber tracts and sawmills. It may carry the raw materials so produced on its own railroads and vessels to the points of fabrication or distribution. It may operate intermediate processing plants such as refineries, blast furnaces, rolling mills, planing mills and spinning mills. Its warehousing facilities may be tremendous. The final manufacturing units may draw on all of these preliminary processing elements and may feed a multitude of sales products to an international merchandising organization. It may operate banks and insurance companies, newspapers and printing plants, may administer communities of employees with the infinite details necessary to everyday life. Many of these elements already exist to a greater or less degree, marking the first steps toward a true industrial socialism.

Place of the Financial Investigation

With the expansion of industrial units the matter of outside financing has assumed a continually greater importance in the affairs of modern business. The past ten years have witnessed also an increasing degree of responsibility upon the part of investment bankers with respect to securities which they place before the public. This responsibility not only concerns itself with the

* Management and Administration.

immediate history of the issue, but also with its probable future in terms of interest, and principal obligations. At the same time there has been a decided tendency throughout the United States toward financing businesses on a long term basis. The natural consequence of these trends has been to develop such methods of analysis as may, to some extent, be used in forecasting the future of a security issue, and also, to some extent, in suggesting safeguards which may preserve its soundness.

These methods of analysis have in a way been forced upon management. It is to be expected that management will be an unintentionally *biased* party and will be itself convinced of the necessity for a security issue; will believe that the proceeds of the financing are to be correctly applied; and will see no real need for any extensive analysis of conditions. On the other hand, the investment banker has seen too many instances of business failure to accept at face value the opinions of the management, even while retaining also a certain *bias* in favor of the issue. Therefore, the day is practically past when the company's statement "per books" is accepted as a basis for long term loans. The audited statement is both the banker's protection and the management's own instrument for internal control. Its position is so well defined and its use so customary that the yearly audit or the audit preliminary to refinancing attract no more than passing attention.

Place of the Appraisal

Still other forms of analysis are, however, neither so well established nor so well understood. Recently because of the wide fluctuation in fixed values and because of past lax handling of plant accounts, the appraisal has begun to attain a standardized place in business analysis. The financial and industrial investigation is still somewhat immature in development and uncertain in its use and status, yet promises to be one of the most effective methods of analysis in the event of refinancing, especially where there is to be a public offering of securities.

Any one who has made a study of business realizes that the true security behind any issue of securities is not the cash in bank, not the accounts receivable, not the inventories, not the plant, nor any of these tangible assets. But the real security behind any issue is the more intangible factor of management which is the cause of the flow of earnings from the use of assets.

While management is always the most vital single element in business, it assumes a broader importance when refinancing is contemplated, because upon this factor rest the expectations of bankers and security holders. Within the loan period of 10, 15, or 20 years the conditions of any given business may change greatly. Patents and copyrights may expire; public favor may change; new inventions in that or in other lines may influence many external conditions; local labor, transportation and sources of material supply may be subject to wide variations. If management does not compensate for these changing conditions by changing the equipment or policies of the business, profits may disappear. Yet even though management is the principal point to be studied, the analysis will be incomplete unless all of the facts of equipment and conditions are also known, since these facts set up the standards for judging the effectiveness and the requirements of management.

The effectiveness of management in the past may be partially gaged from the results shown by correctly audited statements and statistics, but even here the conditions must be shown, since profits sometimes flow from patent monopolies, distribution monopolies, or favorable labor or material markets, in spite of laxness in management.

Present conditions and the trends of conditions may be infinitely more important than the balance sheet and the profit and loss account. Unfortunately, these more vital points are the more intangible points. Experience, knowledge and practiced analysis are required to draw conclusions as to the trend of public favor, trends of the industry as a whole, trend of the economic cycle, the status of the company in the industry, arrangement of organization, personnel, etc.

Differences Between External and Internal Investigations

The external investigation is always largely concerned with past operations as a basis for judging the future, but the internal investigation, on the other hand, is usually concerned with some defect in present operations or present methods. The external proposes to indicate the future course of the business in a broad way, but the internal proposes detailed corrections in order to give generally better future records and operations. The external is broad in scope and most of these investigations cover the same general outline of points, but the internal is usually more detailed, confined to a relatively few points of procedure, with each such investigation very distinct in itself and different from all others. Even if the internal investigation covers a fairly broad field it will do so in the form of a general preliminary survey, to be later supplemented by individual investigations of each important section, which are often intermingled with considerable "installation work."

Thus the scope of an internal investigation may extend from a broad survey of the business as a whole, to determine the causes of existing weaknesses, to a study of some very minor point such as the best method of setting up a certain card index, or the proper form of inventory record in a small warehouse.

Fundamentally, the difference between the two forms of Investigation is that the external discusses conditions with a third party for *protective* purposes, while the internal discusses conditions with the management for *corrective* purposes.

Points for Internal Investigation

Since the internal investigation covers usually the present operating conditions it will only rarely touch such points as markets, condition of the industry, position in the industry, financial policies, etc., which so often are vital and significant points in the external survey. If it does touch these points it will usually be as a part of the problem of investigating budget possibilities, or of developing a new sales product, or correlating sales with production. These, however, are the more unusual subjects for analysis. The more usual points are those in connection with

1—Organization.
2—Materials control.
3—Labor control.
4—Production control.
5—Cost control.
6—Accounting records.
7—Sales records.
8—Miscellaneous records.

Of all of these, probably, costs call for more investigation and installation than any other one problem. This is because cost of sales which, next to sales, is the largest and most important item in the operating statement is, at the same time, the most complex; yet the cost department is of necessity a hybrid, tied on one side to the shop operations and on the other to the books of account. Not infrequently there is no definite supervisory responsibility over the cost work, which may or may not be tied into the books.

Moreover, any investigation of costs must include an investigation of labor, material, production and burden controls, as well as some study of the accounting systems and records, which makes a cost investigation just about as broad a field as one could wish to cover in complete detail.

The internal investigation is so special and so detailed in most cases that very little standardization of data and methods is possible. The external investigations usually follow basically similar lines, and certain sources of data must always be taken into consideration. The following sections, therefore, apply particularly to investigations made for purposes of financing, although many of the same points may arise in the course of internal analysis.

The data gathered in the process of making an investigation varies and has varying importance according to the particular

situation. It varies not only by reason of the internal condition of the business but also by reason of the type of security issue which is proposed.

Thus in an issue of bonds one of the first factors to be considered, though this does not mean the most important factor, is that of property values. Here it is probable that considerable dependence must be placed upon an appraisal. Because of the difference in property values from a "going business" viewpoint and a "liquidation" viewpoint the banker is used to setting up a certain margin or factor of safety between the amount of the bond issue and the apparent value of the property.

Data From Appraisal

The facts brought out by the appraisal, however, cannot be accepted blindly by the investigator who must first study and weigh the appraisal in order to grasp its true significance. The appraisal, for instance, may have been made at a time of low dollar values, such as we have at the present time and had to a greater extent in 1919 and 1920. This may mean that a property which cost new $1,000,000 will be appraised at $2,000,000. This in effect represents the market value of the property. But it is only the market value in case you have a willing or eager buyer. Also, it is a present market value, and if the value of the dollar should change as it does almost continuously, this value will change. Thus the commodity index by Babson was as high as 297 in the year 1920, whereas now it is close to 170. This means that the average something which had a market value of about $3,000,000 in 1920 now has a value of about $1,700,000. The consequence is that plant values as set by appraisal in 1920 have already suffered a great value deflation which has similarly reduced the safety factor of any bond financing predicted on these appraised values.

On the other hand, it cannot be assumed that book values, or cost, are always a safer basis for determining plant values, since it may well be the case that construction was carried on during a period of inflated values and that a subsequent deflation has left an unreal book figure.

It would appear then that almost any data used by the investigator is open to question and analysis, and this is really the true answer, for no data can be accepted for the purpose of the investigation at its face value, no responsibility for actual facts can be shifted on to some other person or some other firm. So in the case of appraisal data the investigator checks it from several different viewpoints, regardless of whether or not it is used in the balance sheet.

It is checked first as to date which in turn correlates with economic cycles to indicate a period of abnormal, normal or subnormal dollar value. Then it is checked by comparison with the book figures, determining the years of principal construction and fitting them also into the economic cycle. If the case appears important it may be advisable to go back over a period of years to apply an adjusted basis of depreciation or to inspect in some detail the property accounts for wrongly capitalized expenditures, or the maintenance and repair accounts for charges which should have been capitalized.

There are, moreover, other important items, especially as applied to the equipment account. The appraisal may set a high value on jigs, patterns or dies which are special to certain orders, which have no value unless there are continuous repeat orders, and which may actually have been charged into the cost of the original job. These values do not support a bond issue and must be separated out in any comment on plant and equipment assets.

Similarly much of the equipment may be in the form of special machines which show a high appraisal value, but which may have no sale value except as junk. They also do not support the issue even though they properly have a place in the accounts and in the appraisal as a value to the going business.

Even the buildings may not have a real liquidation value in the amount indicated by the appraisal or depreciated cost figures, by reason of a number of conditions. They may be of unnecessarily expensive construction, or they may be of a type difficult to adapt to any other lines of business, or they may be located in some place remote from other manufacturing businesses—just some local industry which has grown up far from any industrial center and dependent upon local labor and local goodwill. Any of these conditions would act adversely when it came to selling the buildings.

From these facts it is easy to see why the bankers like to have at least a two-to-one ratio between fixed assets and the size of the issue. It is also easy to see why the investigator cannot merely *accept* the data which comes from other sources. It is not sufficient to secure the truth, the whole truth must be known.

Legal Data

Just as appraisal data are essential, yet must be tempered with information from other sources, so certain legal data are necessary yet must be used in a practical sense.

Situations of this nature arise in connection with the determination of whether a company has a direct or contingent liability for Federal or State income taxes. Even where the audit has been made by other accountants, and where legal advice has been taken in the matter there still remains a responsibility on the part of the investigator to determine whether the tax situation has been correctly handled.

It may happen that there exists an unstated liability great enough seriously to upset the profit figures for past years and to cause a weaker financial position than that stated. On the other hand, there may be a possibility of reducing the stated liability or of securing a refund. It may also be that the assessment has been made and that the financing must be arranged to take care of fairly immediate cash payments.

At still another important point legal data enter into the investigation, this time in connection with the present situation. It may be that the company is suing or being sued, and the status of this litigation will have a bearing on contingent liabilities and possibly on the whole future of the business. Thus there was litigation on the basic Bell telephone patents during their entire life and an adverse decision as to their validity would have changed the entire history of a number of companies. Not only would it have affected the Bell company, but it would have changed the course of the entire industry. A somewhat similar situation exists today in the radio industry, though probably in a more complex form, for not only are basic patents involved, but also a multitude of manufacturing and design patents. Various companies admittedly copy the product of others, and not merely on a "bootlegging" basis. Another striking example of an involved and serious patent situation is to be found in the patent history of the automobile industry, in which the Selden patent was declared invalid by the Supreme Court only after millions of dollars in royalties had been paid.

This legal patent factor comes up in many investigations. It has an effect in determining income, liabilities, future prospects and present policies. Thus some companies under strong patent protection lease their machines instead of selling them, getting a large rental income which will probably cease or be materially reduced after the expiration of the patents. Policies must be so shaped that the transition from a protected situation to a competitive situation may be made without undue loss of income.

There is another angle to this problem, in that patents may carry a large balance sheet value, which may or may not have been depreciated. If the value has been set up in an unreal fashion, through appraisal or excessive assignment of stock, and if adequate depreciation has been provided on the patents on the basis of their book values there may result an element of concealed earnings; or if the patents have not been depreciated, earnings may have been overstated and a write-off of the patent values against surplus may be required on their expiration. Or it may be that depreciation has not been taken in the past, but may be permissible, and may result in a reduction or refund in the prior years' income taxes. The whole question of patent depreciation and the possibility that expenditures for patents may eventually, with propriety, be merged *in toto* with goodwill is, of course, a question to be considered in each individual case. The answer de-

pends largely upon the success of the company in building up goodwill during the protected period. In any event, the investigator must secure all possible legal and practical data regarding the patent situation and must digest and analyze it for its effect on the various phases of the business.

Research Data

Still another class of data which must be gathered and used during the investigation may be called research data. This is of various sorts. Very often, as a preliminary, a study is made of all of the published financial data on the company, for which Poor's and Moody's Manual is the chief source. It may be necessary to go back in these volumes for 10 or 15 years, picking out essential data and having it transcribed for the working papers. Often it is surprising to find how much data may be so gathered on sales, on profits, on balance sheets, on history and financial reorganization and on personnel, much of which is useful in establishing a background for a true understanding of present conditions.

Sometimes this same source permits of gathering data on the company's principal competitors and gives a gauge for judging whether this particular business is maintaining proper profit and expense ratios. Such data are, of course, incomplete, uncertain as to composition, and must be used with caution.

Again, there are industries and businesses in which tariffs are a vital factor and in such cases it is necessary to get not only the existing rulings but also some knowledge of contemplated legislation. For this class of research data one is led to government bureaus and trade associations. Just to illustrate the situation consider the cutlery industry. Here the American manufacturers are in direct competition with Germany. The war has not changed this condition appreciably. Germany excels in its tool steels and pays a price for labor so astoundingly low that often its products can be given a retail price in this country which is lower than the cost of production for American manufacturers. Tariff is at present the only prop which can possibly uphold this industry. Much the same thing has been true in the past in the dye and chemical industries, and it is still truer than is comfortable to contemplate.

Data of this sort are vital, but often other data on the industry are essential even though not quite so important as the tariff condition just noted. For example, the growth of the industry, its total size (expressed in sales, investment, etc.) and its general history should be known if the particular business is to be assigned its place in the industry and if its problems are to be fully understood. For such information one goes first of all to the files of government publications. Usually such data are dependable, but very often are incomplete and care must be taken to sift out what is authentic from what is statistical. Thus the "Census of Manufacturers" now published each five years is probably as accurate as such information can hope to be, but the interim data by years probably will be based on partial or incomplete returns and figures.

One of the surprising things about such research is the great mass of often very detailed data which has been compiled by the U. S. Government on the major industries. On agriculture the information is not only complete and detailed but also very closely up to date. The same thing is true to a lesser extent of the iron and steel industries.

In many of the industries there are trade associations which have unusually complete information on file. The Rubber Association of America is typical.

The search for data is almost a profession in itself and there are firms which specialize in this type of service. A similar, yet basically different source of information is that of the business forecast services, which deal with business as a whole, with certain specific industries in detail, with certain phases of industry (such as the labor question), and with general data on a number of industries. Primarily they supply data on the current situation or else attempt to forecast the trend for a year or more in advance. They have great value, for this purpose, but must be used with discretion, since facts must be differentiated from opinions and opinions may be based on incomplete facts.

The investigator must know how to make the best use of all such sources. Often data must be secured from all sources and then correlated, sifted and judged, to arrive at the true picture. Seldom can research data be accepted at face value and often great masses of non-essential data must be gone through in arriving at the significant facts.

Accounting Data

Naturally a great deal of information must be drawn from the company's own records and it is often a question of what to get, how much to get, how much to omit and how to set up these data in the most forceful form. At first glance, it would appear that there is little sequence, logic or connection to the figures which can be secured.

However, the bulk of the essential and useful material is contained in a connected logical form, the profit and loss statement. By this is not meant merely the usual profit and loss statement, but one which covers a fair period, usually five, but sometimes as much as ten years.

This statement can first be set up in a very condensed manner, having the principal items of net sales, cost of sales, gross profit, other income or deductions, selling expense, general expense, special expenditures (such as Federal taxes) and finally surplus net profit. In this form it usually appears as the principal profit and loss exhibit in the report. Supporting this summary statement detailed tabulations will be prepared analyzing the various sections. Probably sales will be shown by the more important classifications of goods sold and, if possible, cost of sales and gross profit. Then cost of sales may be analyzed as a whole in considerable detail, with particular reference to the items composing manufacturing burden. Another schedule will analyze in detail the items of selling expense while others will similarly analyze general and administrative expense.

Thus there is prepared a complete tie-up analysis of profit and loss over a period of years. In preparing this there is needed a large element of judgment in deciding just how much detail will be shown. If carried out to the extreme of original entries it would, of course, result in the detailing of every transaction taking place in the business, which would then be useless. In other words, the purposes of these statements are summarization and analysis, which in a way are opposite qualities, so the final result is a balance between detail and final figures.

From these analyses one may determine the trend of sales as a whole and by products, gross profits by lines, trends of principal expense items, ratios of various expenditures to sales, trends of net profits, as well as make a multitude of other facts which will have a distinct bearing on company operations and the qualities of management.

Use of Balance Sheets

In addition to this accounting data, setting forth the results from operations by years, there will also be required balance sheets, as at the end of the period, the beginning of the period and preferably at the end of each year in the period under investigation. These will permit stating the trends of inventories, of current assets and liabilities, of fixed assets, of cash, and of receivables, loans and payables. Such analyses are usually best expressed as ratios, usually the ratio to net sales or net profits, but often to each other. The full discussion of the more significant ratios is reserved for later consideration.

From the above data also will be drawn off an application of funds statement which is often one of the most significant single items in an investigation, showing as it does the use management has made of the funds provided.

In some cases the accounting data may be carried a step further. All of the above compilations deal with past records, but it is possible to assume an expected sales volume and then, using the finan-

cial relations developed from past experience, to set up a forecast for the coming year. Usually this will be done where the cash position is a vital factor in order to show the bank loan or credit requirements. Thus there might be developed what is practically a budget for the coming year, and evidenced in monthly balance sheets and profit and loss statements. As has been stated, this is an unusual procedure, but very illuminating if the company appears to be in a dangerous financial position. It is more likely to be done where an issue has "gone bad" than where a security issue is contemplated.

All of this is what may be called routine accounting data. Undoubtedly, in most investigations, there will be a need of special accounting information and analyses incident to the compilation and verification of the results contained in the exhibits.

Relative Importance of Data

While a complete and detailed analysis of a given situation would result in a great mass of information, not all of this material would be pertinent or necessary for the purpose of investigation. A sense of discrimination and relative values must regulate the manner in which the analysis is made. Thus a hasty survey may indicate beyond a doubt the stability of the industry, generally sound policies of merchandising and manufacturing, satisfactory qualities of management. This throws greater importance upon the audit and financial findings, which may then compose more than three-fourths of the entire report, concerned primarily with the average earnings, the various values of assets back of the issue, the position after financing, etc. In short, the report may be concerned primarily with the analysis and interpretation of the facts disclosed by the audit.

On the other hand, the audit and financial data may be unusually complete and satisfactory, the vital questions being those of the industrial future of the business. An example of this latter type might well be found in connection with the financing of a brewery business in 1920 or 1921, when the effects of prohibition were problematical, when the future success of the business might be dependent upon the qualities and marketability of entirely new products, when an entirely new distribution system was being inaugurated, when even new operating processes and personnel were being developed. Here the report could briefly deal with the financial aspects of past performance and present position, but would be forced to give a lengthy and detailed analysis of the industrial problems of the present and future.

A somewhat similar type of report would be required preliminary to the financing of a rubber company in 1921 or 1922, when a tremendous overexpansion of the entire industry had vitally changed the prior industrial status, and when the rate of growth of the automobile industry became a dominant factor in determining when conditions might again approximate a pre-1920 normal.

Factors, such as those just outlined, might cause two reports to take entirely different forms, even though the broad scope of the two investigations was fundamentally the same. In this, the experience and judgment of the investigator come into full play, not only in setting the proper emphasis, but in so shaping the report that the necessity for this emphasis and the importance of certain conclusions is clearly conveyed to the bankers and the management.

Buys Control of Oregon Pulp & Paper Co.

[FROM OUR REGULAR CORRESPONDENT]

PORTLAND, Ore., February 6, 1926.—F. W. Leadbetter has purchased control of the common stock in the Oregon Pulp and Paper Company at Salem, which operates a large mill there. The total capital stock of this company is $2,100,000 of which $800,000 is preferred.

Mr. Leadbetter has been president of the Oregon Pulp and Paper Company since its formation in 1919. He states that this recent purchase will in no way change the personnel of the officers or policies.

Hydro-Electric Development on Nipigon

[FROM OUR REGULAR CORRESPONDENT]

TORONTO, Ont., February 6, 1926.—The Ontario government has decided to authorize a second development of hydro-electric power on the Nipigon River. The site selected is at Alexander Falls, which is about a mile and a half down the stream from the present plant at Cameron Falls. The present output at the latter site is 65,000 horse power. The estimated capacity of the new plant at Alexander Falls, which will cost about $7,000,000, is 50,000 horse power, which will be tied in with the Cameron Falls plant and the combined output will be sent to the head of the Great Lakes over the same transmission line.

Although the Hydro-Electric Power Commission has applications from its present customers for additional power, agreements with several pulp and paper companies, which will be signed by the Ontario government very shortly, made immediate action necessary. At Virgin Falls a regulating dam has been under construction for some time, costing about $250,000. This is practically completed and will enable the Hydro-Commission to conserve the flow of water and provide an immediate storage basin, which will be of advantage to all the plants down the river.

The new pulp and paper mills to be built will add about two thousand tons of news print daily to the present production of the province and the new mills will at once absorb all the new power and more when available. The timber agreements with the pulp and paper companies do not mention power supply, however, and there is no bargain with the companies in this regard. The policy of the Ontario government will be to allow the Hydro-Electric Commission to make its own terms in the power contracts with the paper organizations.

The companies involved are the Fort William Paper Company, the Thunder Bay Pulp and Paper Company, the Nipigon Corporation, and the Provincial Paper Mills. The first agreement following the sale by auction of something less than ten thousand square miles of pulpwood limits in September last was recently completed between the Ontario government and the Spruce Falls Company, of Kapuskasing, which operates the Kapukasing limit along the river of that name and the Ground Hog River, which connects with the former stream. The form of agreement in that case has been closely followed in connection with the four companies to receive their contracts in a few days.

Work on power construction at Alexander Falls will commence as soon as possible. Construction of the paper mills as called for in the agreements will be begun at once and some of the news print units are required to be in operation by the close of the present year. It will be the end of 1927 before the power plant is completed, and the addition of news print units will proceed as more power is available until the full requirements of the timber contracts have been met. Thus, the development of the paper industry in the area concernd, at Port Arthur, Fort William and Nipigon, will proceed concurrently with power production. The simultaneous development of power and timber resources is occasioning considerable favorable comment, the only adverse warning heard being to the effect that great care should be taken by the Ontario government to see that the province is not too rapidly denuded of its forest resources.

To Make News Print From the Parana Pine

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., February 6, 1926.—An interesting experiment has recently been conducted in Germany with a view to ascertaining the possibility and practicability of manufacturing newsprint paper from the Parana pine of Brazil, according to consular advices to the Department of Commerce. The newspaper *A Republica* which is published in Curityba, State of Paran, recently reported that the Commercial Attache of Brazil has informed the President of the State of Paran that the tests thus far conducted had been marked with good results.

Imports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING FEBRUARY 6, 1926

SUMMARY

Cigarette paper .....1925 cs.
Wall paper .....91 bls., 15 cs.
Paper hangings .....8 bls.
Printing paper .....60 cs., 116 rolls
Wrapping paper .....354 bls.
Packing paper .....86 cs., 84 bls., 114 rolls
Kraft paper .....268 rolls
Cover paper .....16 cs.
Filter paper .....55 bls., 161 cs.
Drawing paper .....35 cs.
Tissue paper .....136 cs.
Gallic paper .....3 cs.
Fancy paper .....1 cs.
Writing paper .....9 cs.
Tracing paper .....10 cs.
Colored paper .....1 cs.
Decalcomania paper .....18 cs.
Photo paper .....2 cs.
Pergamyn paper .....31 cs.
Surface coated paper .....5 cs.
Stencil paper .....42 cs.
Wall board .....44 cs.
Miscellaneous paper.....663 rolls, 471 bls., 50 cs.

CIGARETTE PAPER

P. J. Schweitzer, Pr. Harrison, Marseilles, 97 cs.
R. J. Reynolds Tobacco Co., Indep. Hall, St. Nazaire, 700 cs.
De Manduit Paper Corp., Indep. Hall, St. Nazaire, 428 cs.
American Tobacco Co., Indep. Hall, Bordeaux, 700 cs.

WALL PAPER

F. J. Emmerich, Baltic, Liverpool, 7 bls.
F. J. Emmerich, Ausonia, London, 24 bls.
R. F. Downing & Co., Ausonia, London, 29 bls., 4 cs.
Baldwin Universal Co., American Farmer, London, 3 bls.
F. J. Emmerich, American Farmer, London, 3 bls.
W. H. S. Lloyd & Co., American Farmer, London, 25 bls., 10 cs.
Pitt & Scott, Orduna, Hamburg, 1 cs.

PAPER HANGINGS

A. C. Dodman, Jr., Inc., Alaunia, Liverpool, 8 bls.

PRINTING PAPER

B. F. Drakenfeld & Co., Alaunia, Liverpool, 17 cs.
Oxford University Press, Alaunia, Liverpool, 11 cs.
Titan Shipping Co., Olympic, Southampton, 18 cs.
H. Schutte & Co., Conte Rosso, Genoa, 14 cs.
Keuffel & Esser, Albert Ballin, Hamburg, 116 rolls.

WRAPPING PAPER

Maurice O'Meara Co., Westphalia, Hamburg, 238 bls.
T. Barret & Son, Drottningholm, Gothenburg, 87 bls.
Irving Bank-Columbia Trust Co., Drottningholm, Gothenburg, 29 bls.

PACKING PAPER

F. C. Strype, Westphalia, Hamburg, 13 cs.
International Forwarding Co., Westphalia, Hamburg, 72 cs.
Hensel, Bruckman & Lorbacher, Westphalia, Hamburg, 10 bls.
National Consumers Paper Co., Tomalva, Rotterdam, 16 bls., 1 cs.
Steiner Paper Co., Bergensfjord, Oslo, 58 bls.
Okonite Callender Cable Co., American Farmer, London, 114 rolls.

KRAFT PAPER

Arkell Safety Bag Co., Drottningholm, Gothenburg, 268 rolls.

COVER PAPER

International Forwarding Co., Albert Ballin, Hamburg, 16 cs.

FILTER PAPER

Taiyo Trading Co., Takaoka Maru, Kobe, 2 cs.
G. Lueders & Co., Indep. Hall, Bordeaux, 16 bls.
Orbis Products Trading Co., Indep. Hall, Bordeaux, 39 bls.
E. Fougera & Co., Olympic, Bordeaux, 153 cs.
Pfalz & Bauer, Westphalia, Hamburg, 6 cs.

DRAWING PAPER

Keuffel & Esser, Ausonia, London, 2 cs.
Keuffel & Esser, Albert Ballin, Hamburg, 32 cs.
Kolesch & Co., Olympic, Southampton, 1 cs.

TISSUE PAPER

Standard Products Corp., Vincent, Havre, 67 cs.
J. C. Robold, Baltic, Liverpool, 5 cs.
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Phoenix Shipping Co., Westphalia, Hamburg, 4 cs.

STENCIL PAPER

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Arlac Dry Stencil Co., Westphalia, Hamburg, 10 cs.

WALL BOARD

O. M. Baxter, Drottningholm, Gothenburg, 44 cs.

MISCELLANEOUS PAPER

Fuchs & Lang, Pr. Harrison, Shanghai, 13 cs.
Wilkinson Bros. & Co., Inc., Drottningholm, Gothenburg, 27 rolls.
C. K. MacAlpine & Co., Drottningholm, Gothenburg, 326 rolls.
T. Barret & Son, Drottningholm, Gothenburg, 20 bls.
Universal Paper Co., Drottningholm, Gothenburg, 60 bls., 310 rolls.
The Borregaard Co., Inc., Drottningholm, Gothenburg, 264 bls.
Maurice O'Meara Co., Drottningholm, Gothenburg 127 bls.
T. S. Todd, West Arrow, Antwerp, 1 cs.
F. C. Strype, Albert Ballin, Hamburg, 36 cs.

RAGS, BAGGINGS, ETC.

Royal Manufacturing Co., Hofuku Maru, Genoa, 6 bls. bagging.
Royal Manufacturing Co., Hofuku Maru, Genoa, 21 bls. cotton waste.
Brown Bros. & Co., Caledonia, Glasgow, 130 bls. rags.
V. Galaup, Vincent, Havre, 186 bls. rags.
Atterbury Bros., Inc., Vincent, Havre, 99 bls. rags.
D. I. Murphy, Vincent, Dunkirk, 94 bls. rags.
R. Bishop Manfg. Co., Vincent, Dunkirk, 175 bls. rags.
E. J. Keller Co., Inc., Blue Triangle, Alexandria, 366 bls. rags.
Union Trust Co., Blue Triangle, Alexandria, 8 bls. rags.
Salomon Bros. & Co., Blue Triangle, Alexandria, 112 bls. rags.
Salomon Bros. & Co., Indep. Hall, St. Nazaire, 56 bls. rags.
Whaling Waste Products Co., Indep. Hall, St. Nazaire, 48 bls. jute card waste.
Whaling Waste Products Co., West Arrow, Antwerp, 36 bls. jute card waste.
Darmstadt, Scott & Courtney, West Arrow, Antwerp, 638 bls. flax waste.
Maurice O'Meara Co., West Arrow, Antwerp, 70 bls. rags.
W. Steck & Co., Albert Ballin, Hamburg, 91 bls. jute waste.
Whaling Waste Products Co., Albert Ballin, Hamburg, 77 bls. jute card waste.
Anglo-South American Trust Co., Cubano, Buenos Aires, 47 bls. rags.
B. D. Kaplan, Alaunia, Liverpool, 29 bls. rags.
The Stone Bros. Co., Inc., Alaunia, Liverpool, 22 bls. rags.
E. J. Keller Co., Inc., Tomalva, Rotterdam, 58 bls. rags.
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Irving Bank-Columbia Trust Co., Tomalva, Rotterdam, 150 bls. rags.
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Salomon Bros. & Co., Albert Ballin, Hamburg, 280 bls. rags.
E. J. Keller Co., Inc., Albert Ballin, Hamburg, 34 bls. rags.
E. J. Keller Co., Inc., Westphalia, Hamburg, 144 bls. new cuttings.
E. J. Keller Co., Inc., Westphalia, Hamburg, 122 bls. bagging.
E. J. Keller Co., Inc., Westphalia, Hamburg, 46 bls. rags.
Whaling Waste Products Co., Westphalia, Hamburg, 49 bls. jute waste.
New York Trust Co., Westphalia, Hamburg, 54 bls. rags.
Salomon Bros. & Co., Westphalia, Hamburg, 2 bls. rags.
The Barret Co., Westphalia, Hamburg, 138 bls. rags.
G. W. Millar & Co., Inc., Westphalia, Hamburg, 53 bls. rags.
Castle & Overton, Inc., Hoxie, Belfast, 81 bls. bagging.
E. J. Keller Co., Inc., Volendam, Rotterdam, 41 bls. rags.

OLD ROPE

Brown Bros. & Co., Bristol City, Bristol, 238 bls.
E. J. Kelltr Co., Inc., Westphalia, Hamburg, 106 bls.

MANILA ROPE

Republic Bag & Paper Co., Pr. Harrison, Manila, 351 coils.
Peck & Mack, Pr. Harrison, Manila, 273 pgs.
Manufacturers Trust Co., Pr. Harrison, Manila, 279 pgs.

WOOD PULP

Tidewater Papermills Co., Bornholm, Liverpool, N. S., 10,216 bls. wood pulp.
Tidewater Papermills Co., Bornholm, Liverpool, N. S., 1777 bls. sulphite.
Irving Bank-Columbia Trust Co., Fordson I, Hamburg, 706 bls. wood pulp, 109 tons.
Chemical National Bank, Bergensfjord, Oslo, 750 bls. sulphite.
Buck, Kiaer & Co., Inc., Bergensfjord, Hommelvik, 2526 bls. sulphite.
Buck, Kiaer & Co., Inc., Bergensfjord, Oslo, 2200 bls. sulphite.
Scandinavian Pulp Agency, Inc., Drottningholm, Gothenburg, 1524 bls. kraft pulp.
Bulkley, Dunton & Co., Drottningholm, Gothenburg, 1000 bls. sulphite.
E. M. Sergeant & Co., Drottningholm, Gothenburg, 510 bls. sulphite.
E. M. Sergeant & Co., Drottningholm, Gothenburg, 299 bls. dry soda pulp.
Johanson, Wales & Sparre, Inc., Drottningholm, Gothenburg, 359 bls. dry soda pulp.
J. Anderson & Co., Drottningholm, Gothenburg, 2250 bls. sulphite.
Price & Pierce, Ltd., Drottningholm, Gothenburg, 1200 bls. wet pulp.
Bulkley, Dunton & Co., St. Anthony, Gefle, 2750 bls. sulphite, 558 tons.
Pagel, Horton & Co., Inc., St. Anthony, Gefle, 375 bls. sulphite, 76 tons.
Pagel, Horton & Co., Inc., St. Anthony, Gefle, 3500 bls. sulphate, 711 tons.
Castle & Overton, Inc., Albert Ballin, Hamburg, 1195 bls. wood pulp, 239 tons.
Castle & Overton, Inc., Montpelier, Hamburg, 2134 bls. wood pulp.
Buck, Kiaer & Co., Inc., Idefjord, Oslo, 200 bls. kraft pulp.

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(*Continued from page 64*)

WOOD PULP BOARDS

M. Meyerson, Drottningholm, Gothenburg, 36 bls.

WOOD FLOUR

B. L. Soberski, Bergensfjord, Frederikstad, 750 bags.

E. M. Sergeant & Co., Drottningholm, Gothenburg, 339 bags.

CHINA CLAY

C. T. Wilson & Co., Inc., Bristol City, Bristol, 30 casks.

CASEIN

Crawford, Hammond & Co., Port. Prince, Buenos Aires, 584 bags, 35,040 kilos.

Casein Manufacturing Co., Commack, Buenos Aires, 834 bags, 110,288 kilos.

Bank of America, Boswell, Buenos Aires, 567 bags.

The Kalbfleisch Corp., American Legion, Buenos Aires, 1251 bags.

T. M. Duche & Sons, American Legion, Buenos Aires, 150 bags.

T. M. Duche & Sons, Cubano, Buenos Aires, 2835 bags, 170,100 kilos.

Bank of America, Cubano, Buenos Aires, 1010 bags, 41,288 kilos.

Atterbury Bros., Inc., Cubano, Buenos Aires, 500 bags, 30,000 kilos.

Casein Manufacturing Co., Cubano, Buenos Aires, 417 bags, 25,000 kilos.

National City Bank, Brazilian Prince, Buenos Aires, 360 bags, 18,000 kilos.

PHILADELPHIA IMPORTS

WEEK ENDING FEBRUARY 6, 1926

E. J. Keller Co., Inc., Indep. Hall, St. Nazaire, 135 bls. rags.

E. J. Keller Co., Inc., Tomalva, Rotterdam, 374 bls. rags.

Philadelphia National Bank, Tomalva, Rotterdam, 107 bls. rags.

The Stone Bros. Co., Inc., Tomalva, Rotterdam, 44 bls. rags.

S. Birkenstein & Son, Tomalva, Rotterdam, 129 bls. rags.

Castle & Overton, Inc., Tomalva, Rotterdam, 125 bls. rags.

Old Colony Trust Co., London Commerce, London, 124 coils old rope.

Old Colony Trust Co., London Commerce, London, 26 bls. old rope.

Brown Bros. & Co., London Commerce, London, 49 bls. rags.

A. W. Fenton, Inc., London Commerce, London, 85 bls. rags.

E. J. Keller Co., Inc., Alaska, Dunkirk, 420 bls. rags.

E. J. Keller Co., Inc., Napierian, Antwerp, 83 bls. rags.

E. J. Keller Co., Inc., Cabo Tortosa, Barcelona, 288 bls. rags.

E. J. Keller Co., Inc., Cabo Tortosa, Genoa, 65 bls. thread waste.

E. J. Keller Co., Inc., Isarco, Genoa, 96 bls. cotton waste.

NEW ORLEANS IMPORTS

WEEK ENDING FEBRUARY 6, 1926

Castle & Overton, Inc., West Eual, France, 107 bls. bagging.

Castle & Overton, Inc., West Eual, France, 163 bls. rags.

Castle & Overton, Inc., Gand, Antwerp, 374 bls. rags.

BALTIMORE IMPORTS

WEEK ENDING FEBRUARY 6, 1926

J. J. Patricof, Vincent, Dunkirk, 89 bls. rags.

E. J. Keller Co., Inc., Maryland, Antwerp, 375 bls. flax waste.

E. J. Keller Co., Inc., Maryland, Mannheim, 900 bls. wood pulp.

Castle & Overton, Inc., Savandaga, Rotterdam, 2812 bls. wood pulp.

Bulkley, Dunton & Co., Lodovica, ———, 1960 bls. wood pulp.

Bulkley, Dunton & Co., Lorain, ———, 1580 bls. wood pulp.

Bulkley, Dunton & Co., Pfalz, ———, 1220 bls. wood pulp.

Bulkley, Dunton & Co., Halse, ———, 7050 bls. wood pulp.

Bulkley, Dunton & Co., Boschdyk, ———, 830 bls. wood pulp.

NORFOLK IMPORTS

WEEK ENDING FEBRUARY 6, 1926

Lagerloef Trading Co., Minnequa, Kotka, 458 bls. wood pulp boards, 77 tons.

Parsons & Whittemore, Inc., Minnequa, Kotka, 376 rolls news print.

PORTLAND IMPORTS

WEEK ENDING FEBRUARY 6, 1926

Pagel, Horton & Co., Inc., St. Anthony, Gefle, 2500 bls. sulphate, 508 tons.

Pagel, Horton & Co., Inc., St. Anthony, Gefle, 5000 bls. sulphite, 1016 tons.

BOSTON IMPORTS

WEEK ENDING FEBRUARY 6, 1926

Atterbury Bros., Inc., Commack, Buenos Aires, 196 bags casein, 26,195 kilos.

Atterbury Bros., Inc., Port. Prince, Buenos Aires, 500 bags casein, 30,000 kilos.

Lagerloef Trading Co., Minnequa, Kotka, 96 bls. wood pulp boards, 9 tons.

Pagel, Horton & Co., Inc., St. Anthony, Gefle, 1250 bls. sulphate, 254 tons.

Pagel, Horton & Co., Inc., St. Anthony, Gefle, 5000 bls. sulphite, 1016 tons.

Bulkley, Dunton & Co., St. Anthony, Gefle, 2250 bls. sulphite, 451 tons.

Castle & Overton, Inc., Seattle Spirit, Hamburg, 800 bls. wood pulp.

Castle & Overton, Inc., Savandaga, Rotterdam, 568 bls. wood pulp.

E. J. Keller Co., Inc., Pr. Harrison, Genoa, 66 bls. thread wastt.

E. J. Keller Co., Inc., Westerner, Rotterdam, 292 bls. rags.

E. J. Keller Co., Inc., West Campgaw, Hamburg, 203 bls. rags.

D. S. Gottesman of M. Gottesman Honored

D. S. Gottesman, President of M. Gottesman & Co., Inc., 18 East 41st street, New York City, is receiving the congratulations of his friends on his election to the chairmanship of the board of directors of the Central National Bank of the City of New York.

The Central National Bank is housed in the beautiful, new Central National Bank Building at the corner of Broadway and 40th street, and formally opened for business on January 28, 1926 with an initial paid-in capital and surplus of $2,500,000.

The president of the Central National Bank is Archibald F. Maxwell who comes to this institution from the National Bank of Commerce of the City of New York with which institution he has been connected for about twelve years. The entire staff of the new bank is made up of expert banking men who are specialists in their particular field. They include J. R. Postal, cashier, who was formerly vice-president of the Hamilton National Bank and Mr. G. A. Gehrken, Assistant Cashier, who was formerly associated with the Seaboard National Bank.

The directors of the Central National Bank are made up of some of the leading merchants and bankers in the City of New York, and include the following: Chauncey H. Murphey, Davies, Thomas & Co., members New York Stock Exchange; S. Newman, vice-president Brown-Wheelock; Harris-Vought Co., Real Estate; J. Lewis Hay, president, Hay Foundry and Iron Works, steel and iron; and Harry A. Smith, president, National Fire Insurance Company, Hartford, Conn.

D. S. Gottesman is also treasurer and director of the Broadway-40th Street Corporation, director of the Central National Safe Deposit Company and M. Gottesman & Co., Aktiebolag of Stockholm, Sweden. The establishment of M. Gottesman & Co., New York dates back to 1886, and the organization is now entering its 40th year.

In addressing the stockholders, of which there were about 300 present at the Stockholders' Dinner prior to the opening of the Bank, Mr. Gottesman said:

"It is my firm conviction that the institution will grow into a position of prominence and leadership and will not only reflect credit on everyone connected with it but will also become a vital factor in the commercial progress of our great city."

Cutting Much Pulpwood in Adirondacks

[FROM OUR REGULAR CORRESPONDENT]

ALBANY, N. Y., February 8, 1926.—Reports from all sections of the Adirondacks indicate that pulpwood is being cut more extensively and unless some freak of the weather interferes more pulp wood will be taken out of the woods this winter than has been the case for several years. Woods contractors and jobbers are at work all through the Adirondack section and huge piles of pulp wood are being stacked along the streams and railroads. Several thousand cords are stacked in the vicinity of Thendara ready to be driven down the south branch of the Moose River to go to the huge pulp mills along the Black River. Reports from Old Forge and Carter state that the pulp job in that section is nearing completion with some of the logs in the river.

WOOD PULP
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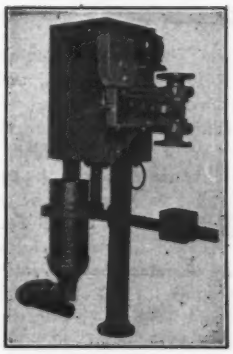

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"Made in Canada"? Yes.

Obituary

William F. McQuillen

BOSTON, Mass., February 6, 1926.—In the passing of William F. McQuillen, at the Hotel Royal Palms, Miami, Florida, last week, the paper trade of the United States, and more particularly New England and Boston, lost one of its best known and beloved members. Mr. McQuillen had been in the south only a short while, leaving his desks at Storrs and Bement, where he was treasurer, only a few days ago. Mr. McQuillen, a pioneer in the business, was active up to the time he started on his annual trip south, and his Boston associates and friends were stunned to learn of his death. Mr. McQuillen was 65 years old.

Services were held Monday, February 8, at All Saints' Church, Brookline. Interment was in the family plot in Dedham, Mass.

WILLIAM F. MCQUILLEN

Mr. McQuillen is survived by his wife. There were no children. A niece, Mrs. Edward L. Martinez, of Dedham, Mass., and a nephew, Bryant McQuillen, of Newtonville, also survive. Employees, including the McQuillen Associates, a welfare organization of Storrs and Bement, named in honor of Mr. McQuillen, attended the funeral services in a body. Prominent men of the paper industry from New England attended and were among the pallbearers. Floral tributes came from all parts of the United States.

The pallbearers were: John E. A. Hussey, International Paper Company, Boston; William C. Ridgway, secretary of the National Paper Trade Association; Forest Hopkins, of the Paper Mills Company, Chicago; F. T. Cummings and William B. Stevenson, both of Storrs and Bement; Charles S. Proctor, of the Charles S. Proctor Paper Company, Boston; Charles A. Cobb, of Storrs and Bement; Roger Day Smith, president of the S. D. Warren Company, paper manufacturers; William W. Morse, of Boston, and Fritz Lindenmyer, of Henry Lindenmyer and Sons, New York.

For years Mr. McQuillen was intensely interested in the welfare of the paper business. His activities soon made him a national character in the business. Twice he served as president of the National Paper Trade Association. He has also served as president of the New England Paper Merchants' Association, the Boston Paper Trade Association, and at one time was president of the Paper House of New England at Springfield. Forty of the forty-six years he spent in the paper trade were with Storrs and Bement, Federal street paper merchants, one of the oldest and best known paper houses in the country.

In 1887 he and two partners, R. C. McQuillen and Charles M. Bryant, bought the paper business of Amariah Storrs and Bement, and founded the present firm of Storrs and Bement Company. Later, through the death of his partners, it became necessary for him to handle the entire business, which he did, and continued to do so with great success up to his passing.

The deceased was always a welcome figure at paper trade conventions, and he cherished the record of missing but one national convention during the history of the national association. His advice was sought on many matters of vital importance to the industry. His word on certain phases of the trade was authoritative, and his papers, read at the various conventions, were always accepted as such. His friends were countless. Genial, humble, yet insistent upon the right, he was always willing to lay aside important duties to aid a brother.

Mr. McQuillen was a member of the Algonquin and Exchange Clubs and was a 32d degree Mason.

Evan G. Badger

PHILADELPHIA, Pa., February 8, 1926.—In the sudden death last week of Evan G. Badger, the Philadelphia paper stock trade loses one of its pioneers in association affairs and a former important member of the industry in the olden times of his active connection with its business life. Mr. Badger was for 15 consecutive years elected president of the Philadelphia Paper Stock Dealers Association, holding that office at the time of his death, last Tuesday, when he was suddenly stricken at his home, 1234 S. Broad street. His death resulted from a stroke with which he was attacked while apparently enjoying good health.

He was the pioneer spirit in organizing the Philadelphia Association and was a charter member of the organization, having founded it more than 22 years ago. About ten years ago he retired from active business life upon the sale of his firm and its assets to William J. McGarity of the Penn Paper and Stock Company. He was for more than 40 years engaged in the paper stock business under the firm title of Evan G. Badger & Son, at 916 Cherry street, in association with his only son, Benjamin Badger. At the time of his death he was in his 77th year of age.

He was a member of the F. A. and M. and was buried with Masonic Rites on Tuesday of this week. The entire membership of the Philadelphia Wholesale Waste Merchants Association, the recently reorganized Paper Stock Dealers Association, attending in a body. At the time of his passing he was up for re-election, having been nominated at the January session of the Assiciation for election at the annual meeting to be held at the Ben Franklin Hotel on March 11.

Canadian Lumbermen

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., February 8, 1926.—The annual meeting of the Canadian Lumbermen's Association was held in Montreal during the week, and was largely attended.

The following directors were elected for a term of three years: Ontario, Walter C. Laidlaw, Toronto; Walter M. Ross, Ottawa, and A. B. Gordon, Toronto; Quebec: Arthur H. Campbell and J. S. Bock; New Brunswick: W. E. Golding; Nova Scotia: Rufus E. Dickie.

Mr. Dickie was also elected president of the association for the year 1926. Walter M. Ross was elected first vice-president; Brig.-Gen. J. B. White, of Montreal, second vice-president, and R. L. Sargeant was reappointed secretary and manager of transportation. R. G. Cameron was reappointed honorary-treasurer.

David Champoux, of Bathurst, N. B., the retiring president, in his address remarked the outlook for the lumber industry was much more favorable than it was a year ago. He predicted that conditions would be better from now on.

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New York Market Review

Office of the PAPER TRADE JOURNAL,
Wednesday, February 10, 1926.

Conditions in the local paper market are fairly satisfactory. The demand for the various grades of paper is quite healthy and there are many reports of transactions in excess of a year ago. A heavy spring trade is anticipated by the sales organizations of the leading paper houses and the outlook for the future is decidedly bright.

News print continues in good request and a further expansion of consumption is confidently anticipated. Spot offerings are limited and prices are very firm. Advertising and circulation appears to be steadily increasing in the foremost publications and there is every prospect of the current year proving another record one.

The various grades of paper board are in strong demand and prices are holding up well. Fine papers are moving in good volume and the coarse paper market is also sharing in the general expansion.

Mechanical Pulp

Some improvement has been noticed in the ground wood market and a steady buying movement is apparently under way. Spot offerings are still limited, however, and prices are relatively high. Domestic ground wood is very firm at from $28 to $32 per ton, f.o.b. mill, and imported is selling at from $35 to $40 a ton, ship side.

Chemical Pulp

Demand for chemical pulp is persistent and the market is exhibiting quite a firm tone. A good percentage of the Swedish output for 1927 has already been contracted for, according to reports from reliable sources. Domestic and Canadian producers have very little chemical wood pulp to offer at the present time and in some cases higher prices are being asked.

Old Rope and Bagging

The domestic rope market is in a better condition. Demand has improved and dealers are expecting firmer prices in the near future. Sales of bagging have also increased and prices are being well maintained at recently quoted levels. New burlap cuttings and bleachery burlap are in specially good request.

Rags

More business is being received from the paper mills than of late and low and medium grades are moving in a satisfactory manner. High grade cuttings are rather neglected and prices are more or less nominal. Buyers of both domestic and imported stock are looking for a busy spring season, as many consumers will be forced to replenish their depleted stocks.

Waste Paper

The waste paper market has been fairly lively during the past week. Book stock has been in better request from the book mills. An increased demand has also been experienced for mixed papers. Demand for old kraft paper is about normal and prices are holding up well. The white blank news market has been rather dull although an improved demand may be expected to develop at any time.

Twine

Trading in the twine market has been mostly on routine lines although the spring trading season may be expected to bring greater activity. Prices of most grades are being well maintained and the market is in a sound condition considering everything.

December Pulp and Paper Production Statistics

The December production of paper in the United States as reported by identical mills to the American Pulp and Paper Association and cooperating organizations, showed an increase of 1 per cent as compared with November's production, following a 7 per cent decrease in November over October, according to the Association's Monthly Statistical Summary of Pulp and Paper Industry. All grades showed an increase in production as compared with November, with five exceptions.

The Summary is prepared by the American Paper and Pulp Association as the central organization of the paper industry, in cooperation with the Binders Board Manufacturers Association, Converting Paper Mills Association, Cover Paper Association, Newsprint Service Bureau, Wrapping Paper Manufacturers Service Bureau and Writing Paper Manufacturers Association.

The figures for December for same mills as reported in November are:

Grade	Number of Mills	Production Net Tons	Shipments Net Tons	Stocks on Hand End of Month Net Tons
News print	65	135,853	136,896	16,183
Book	61	87,237	87,601	44,662
Paperboard	101	121,324	120,065	31,115
Wrapping	77	48,491	51,687	42,539
Bag	24	7,422	6,929	7,299
Fine	78	30,605	30,722	40,090
Tissue	45	11,501	11,126	12,376
Hanging	8	4,569	4,743	1,450
Felts	18	13,515	12,678	3,212
Other Grades	64	20,694	19,768	17,986
Total—All Grades		481,211	482,215	216,912

During the same period, domestic wood pulp production increased 2 per cent, this increase being distributed over three grades. The December totals (mills identical with those reporting in November) as reported by the American Paper Pulp Association, are as follows:

Grade	Number of Mills	Production Net Tons	Used Net Tons	Shipments Net Tons	Stocks on Hand End of Month Net Tons
Groundwood Pulp	95	93,144	87,618	4,622	124,742
Sulphite News Grade	36	36,832	33,403	3,256	9,120
Sulphite Bleached	20	21,355	17,307	3,743	3,669
Sulphite Easy Bl.	6	3,587	3,341	766	921
Sulphite Mitscherlich	6	6,787	5,649	978	526
Sulphate Pulp	9	13,349	11,880	1,557	1,113
Soda Pulp	11	16,511	12,323	4,505	3,467
Other than Wood Pulp	2	107	46	49	56
Total—All Grades		191,672	171,567	19,476	143,614

Hartje Paper Co. Sold for $350,000

[FROM OUR REGULAR CORRESPONDENT]

STEUBENVILLE, Ohio, February 6, 1926.—The Hartje Paper Company's plant here, which went into the hands of receivers six months ago, was sold for $350,000 last week in a master's sale. L. J. Cullen, of Chicago, representing the holders of the first mortgage, made the purchase. The plant was established by the late Augustus Hartje, of Pittsburgh.

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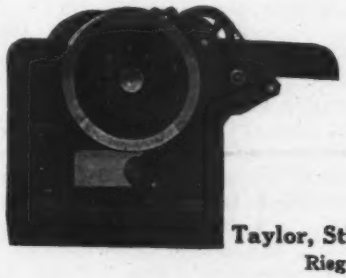

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Miscellaneous Markets

Office of the PAPER TRADE JOURNAL,
Wednesday, February 10, 1926.

Trading in the local chemical market was fairly active during the past week. The spot situation was rather unsettled, however, although there has been very little shading of prices. Contract withdrawals are proceeding at a satisfactory pace. In most divisions of the chemical industry prices are being generally well maintained and manufacturers are looking forward to a busy spring season.

BLANC FIXE.—The blanc fixe market continued practically unchanged. Only a moderate demand was experienced for prompt deliveries and the paper mills are apparently not inclined to purchase far in advance of actual needs. The pulp is still quoted at from $60 to $64 a ton and the powder at from 3¾ to 4¼ cents a pound, in barrels, car lots, at works.

BLEACHING POWDER.—The improved tone of the bleaching powder market has been well maintained and supplies have been moving to consumers in good volume. The present satisfactory condition of this market is expected to continue for some time. Bleaching powder is selling at from $2 to $2.40 per 100 pounds, in large drums, at works.

CAUSTIC SODA.—The caustic soda market is in a sound position. Most of the contract business for the current season has already been closed, and the tonnage booked indicates a consumption fully equal to that of last year, which was unusually good. Quotations on caustic soda have ranged from $3.10 to $3.15 per 100 pounds, at works. Spot car lots are selling at from $3.10 to $3.25 per 100 pounds.

CASEIN.—Both domestic and imported casein are in fair demand, although most of the transactions reported were of small dimensions. Offerings have been rather limited but, taking everything into consideration, prices are holding up well. Domestic casein is quoted at from 12½ to 13 cents a pound, according to grade, and foreign casein is selling at 13½ cents a pound, all in bags.

CHINA CLAY.—The china clay market is proceeding along routine lines and no important developments have been experienced of late. Offerings of imported china clay are limited and prices are well held at former levels. Demand for domestic clay is fairly satisfactory. Imported china clay is quoted at from $13 to $22 a ton, ship side, while domestic washed clay is selling at $8 a ton, at mine, and pulverized at $10 a ton.

CHLORINE.—Manufacturers of chlorine are reported to be well sold up and the market is in an exceptionally strong state. Contract withdrawals are going forward in good volume and prices are very firm. Chlorine is still quoted at 4 cents a pound, in tanks, or multi-unit cars, at works, on contract orders. The spot quotation remains firm at around 4½ cents a pound.

ROSIN.—Inquiries from the paper mills are said to be reaching the rosin market in increasing volume and an optimistic feeling prevails in the industry. Most of the purchasing in recent weeks, however, has been limited to moderate quantities, and buying will have to speed up a lot to reach normal proportions. At the naval stores, rosin is now quoted at from $14.50 to $14.75 per 280 pounds, ship side, in barrels.

SALT CAKE.—Conditions in the salt cake market are excellent and many of the large mills are reported to be replenishing their stocks. In unison with the increased demand prices are very firm. Salt cake is now selling at from $17 to $20 a ton, in bulk, at works.

SODA ASH.—The steady tone of the soda ash market continues. February contract withdrawals are holding up well to the previous average. Consumption has been very satisfactory so far this year and there is every prospect of its continuing so. Contract quotations, basis 58 per cent, in car lots, at works, per 100 pounds, are as follows: In bulk, $1.25; in bags, $1.38, and in barrels, $1.63.

STARCH.—No radical changes have been reported in the starch market for some time. The demand from the paper mills continues on routine lines and prices are generally well maintained. Special paper makers starch is quoted at $3.32 per 100 pounds, in bags and barrels.

SULPHATE OF ALUMINA.—The market for sulphate of alumina is steadily expanding and shipments are moving at a good pace. Manufacturers are reported to be well booked up and spring contract withdrawals are expected to be heavy. Sulphate of alumina is quoted at from $2 to $2.05 per 100 pounds, for the iron free, in bags, at works, in car lots, and at from $1.40 to $1.45 for commercial grades.

SULPHUR.—The sulphur market is as strong as ever. Demand is large and contract withdrawals are heavy. Consumption is expanding steadily. Sulphur is quoted at from $15 to $16 a ton, in bulk, at mine, and at from $20 to $21 a ton, ship side.

TALC.—The talc market continues to exhibit a steady tone. Contract withdrawals are normal for the time of the year and the manufacturers are confident of continued expansion from now on. Talc continues to sell at from $16 to $18 a ton, at eastern mines according to grade.

MacSimBar Paper Co. Retires Bonds

[FROM OUR REGULAR CORRESPONDENT]

KALAMAZOO, Mich., February 8, 1926.—During 1925 the MacSimBar Paper Company retired a $225,000 bond issue. That was a feature of the report offered at the annual meeting, which was held in the company's offices in Otsego. Business has been very satisfactory during the past twelve months. The new turbine room and equipment is completed and in operation and works to satisfaction.

All directors were re-elected as follows: S. B. Monroe, George D. Cobb, W. E. Kidder, Kalamazoo; Florence G. Bardeen, C. E. Nelson, S. W. Simpson, Otsego; Fred C. Hall, Grand Rapids; E. W. Stone, Allegan; John Vanderveen, Holland, and Wilfrel Thompson, Detroit, the latter successor to his father, J. W. Thompson, retired.

The officers are: President, Charles E. Nelson; vice president, S. W. Simpson; secretary-treasurer, S. B. Monroe; assistant secretary-treasurer, George D. Cobb.

Amthor Quadrant Scale

The Amthor Quadrant Scale is designed to show the basis weight of cordage, paper, rubber, foil, wire, labels, tags, wrappers and similar materials directly, automatically and instantly merely by using a small sample. It is invaluable for salesmen for checking samples and for purchasers to see that the correct merchandise is received.

This scale is of a very high precision type; it is made with the finest and most modern tools and each is graduated individually by hand. It is constructed on the gravity principle; springs and connecting pieces, which would cause the scale to get out of calibration are eliminated. It is of simple but durable construction extremely sensitive and absolutely accurate. It is entirely constructed of brass, highly gold lacquered, with quadrant frosted silvered and engravings in black.

Special graduations and ranges are made to order by the manufacturers, the Amthor Testing Instrument Company, 309 Johnson street, Brooklyn, N. Y.

Federal Charter Granted Kilgours

Kilgours Ltd., has been granted a federal charter with a special stock consisting of 10,000 shares without nominal or par value which may be issued and allotted for such consideration not exceeding $5 per share as may be fixed by the Board of Directors. Their chief place of business is in Toronto and the company is empowered to carry on the business of manufacturers and dealers in envelopes, paper boxes, cartons, bags, packages, etc.